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§ 52.21 Prevention of significant deterioration of air quality.

State implementation plan which has been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards. Specific disapprovals are listed where applicable, in subparts B through DDD of this part. The provisions of this section have been incorporated by reference into the applicable implementation plans for various States, as provided in subparts B through DDD of this part. Where this section is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. No disapproval with respect to a State's failure to prevent significant deterioration of air quality shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

- (2) Applicability procedures.(i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the
- (ii) The requirements of paragraphs (j) through (r) of this section apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides.
- (iii) No new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The Administrator has authority to issue any such permit.

§ 52.21 Prevention of significant deterioration of air quality.

(a)(1) Purpose. The purpose of this rule is to implement the prevention of significant deterioration program, as set forth in Sections 160 - 169B of the federal Clean Air Act, 42 U.S.C. §§ 7470-

- (2) Applicability procedures.(i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the federal Clean Air Act.
- (ii) The requirements of paragraphs (j) through (r) of this section apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides.
- (iii) No new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The permitting authority has authority to issue any such permit.

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(iv) [This paragraph (a)(2)(iv) specifies the applicability test to be used. Three options are presented here. If the permitting authority wants to offer only the actual-to-potential applicability test, then use Option (a)(2)(iv)-A. If the permitting authority generally wants to provide the actual-topotential test, but also wants to offer, for electric utility steam generating units only, the actual-to-projectedactual applicability test, then use Option (a)(2)(iv)-B. If the permitting authority wants to provide the actual-toprojected-actual applicability test for modifications at all existing units, then use Option (a)(2)(iv)-C.

Each of these three options contains three suboptions. The first provides that in order to trigger PSD applicability, both a significant emissions increase and a significant net emissions increase are necessary. The second suboption requires only a significant emissions increase to trigger applicability and eliminates the concept of netting. The third suboption requires only a significant net emissions increase to trigger applicability.]

(iv) Option (a)(2)(iv)-A (Actual-to-Potential Test Only)

(iv) The requirements of the program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(\underline{a}) through (\underline{c}) of this section. Before beginning actual construction of a project, the owner or operator shall determine applicability of this section in accordance with paragraphs (a)(2)(iv)(\underline{a}) through (\underline{c}).

- (a) Suboption A-1 for Option (a)(2)(iv)-A [This option retains the netting concept and requires both a significant emissions increase and a significant net emissions increase to trigger applicability.]
- (\underline{a}) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases a significant emissions increase (as defined in

(iv) The requirements of the program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(\underline{a}) through (\underline{f}) of this section.

 (\underline{a}) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases – a significant emissions increase (as defined in

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paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

- (b) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(\underline{c}) through (\underline{f}) of this section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in paragraph (b)(3) of this section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.
- (c) Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (b)(41) of this section) and the baseline actual emissions (as defined in paragraphs (b)(48)(i) and (ii) of this section), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).
- (<u>d</u>) <u>Actual-to-potential test for</u> projects that only involve construction of a new emissions unit(s). A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(4) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (b)(48)(iii) of this section) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).
- (e) Emission test for projects that involve Clean Units. For a project that

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paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(a) Suboption A-2 for Option (a)(2)(iv)-A [This option eliminates the netting concept.]

- (\underline{a}) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes a significant emissions increase.
- (a) Suboption A-3 for Option (a)(2)(iv)-A [This option requires only a significant net emissions increase to trigger applicability.]
- (\underline{a}) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). If the project would not result in a significant emissions increase, but would result in a significant net emissions increase, then the project is a major modification. Also, if the project would result in a significant emissions increase, but would not result in a significant net emissions increase, then the project is not a major modification.
- (\underline{b}) The emissions increase from the project is determined by taking the sum of the emissions increases from each emissions unit affected by the project. An emissions unit is considered to be affected by the project if an emissions increase from the unit would occur as a result of the project, regardless of whether a physical change or change in the method of operation will occur at the particular emissions unit.
- $(\underline{\sigma})$ For each emissions unit affected by the project, the emissions increase is

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will be constructed and operated at a

Clean Unit without causing the emissions unit to lose its Clean Unit designation, no emissions increase is deemed to occur.

(<u>f</u>) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs $(a)(2)(iv)(\underline{c})$ through (\underline{e}) of this section as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section). For example, if a project involves both an existing emissions unit and a Clean Unit, the projected increase is determined by summing the values determined using the method specified in paragraph (a)(2)(iv)(c) of this section for the existing unit and using the method specified in paragraph (a)(2)(iv)(e) of this section for the Clean Unit.

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determined by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions.

(iv) Option (a)(2)(iv)-B (Actual-to-Potential Test, but Actual-to-Projected-Actual for EUSGUs)

(iv) The requirements of the program will be applied in accordance with the provisions in paragraphs (a)(2)(iv)(a) through (\underline{d}) of this section. Before beginning actual construction of a project, the owner or operator shall determine applicability of this section in accordance with paragraphs $(a)(2)(iv)(\underline{a})$ through (\underline{d}) . [Note: if the permitting authority does not want to include a demand growth exclusion, remove the italicized language.1

(\underline{a}) Suboption B-1 for Option (a)(2)(iv)-B[This option retains the netting concept.]

(a) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases - a significant emissions increase (as defined in paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(a) Suboption B-2 for Option (a)(2)(iv)-B [This option eliminates the netting concept.]

(a) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes a significant emissions increase.

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- (a) Suboption B-3 for Option (a)(2)(iv)-B [This option requires only a significant net emissions increase to trigger applicability.]
- (\underline{a}) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). If the project would not result in a significant emissions increase, but would result in a significant net emissions increase, then the project is a major modification. Also, if the project would result in a significant emissions increase, but would not result in a significant net emissions increase, then the project would not be a major modification.
- (\underline{b}) The emissions increase from the project is determined by taking the sum of the emissions increases from each emissions unit affected by the project. An emissions unit is considered to be affected by the project if an emissions increase from the unit would occur as a result of the project, regardless of whether a physical change or change in the method of operation will occur at the particular emissions unit.
- $(\underline{\sigma})$ For each emissions unit affected by the project, the emissions increase is determined by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions.
- (\underline{d}) Notwithstanding paragraph $(a)(2)(iv)(\underline{c})$ of this section, if any emissions unit affected by the project is an electric utility steam generating unit, then the emissions increase from each such unit shall be determined according to paragraphs $(a)(2)(iv)(\underline{d})(1)$ or $(a)(2)(iv)(\underline{d})(2)$ below.
- (1) The emissions increase from each such unit shall be the difference between the projected actual emissions, following completion of the project, and the baseline actual emissions. In determining the projected actual emissions, the owner or operator of the major stationary source:
- (A) Shall consider all relevant information, including but not limited

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- to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and.
- (B) Shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; and
- (C) Shall exclude, in calculating any increase in emissions that results from the particular project, for calculations involving an electric utility steam generating unit, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth.
- (2) In lieu of $(\underline{d})(1)$, the owner or operator may elect to determine the emissions increase by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions.

(iv) Option (a)(2)(iv)-C (Actual-to-Projected-Actual Test for Existing Units)

- (iv) The requirements of the program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(\underline{a}) through (\underline{d}) of this section. Before beginning actual construction of a project, the owner or operator shall determine applicability of this section in accordance with paragraphs (a)(2)(iv)(\underline{a}) through (\underline{d}). [Note: if the permitting authority does not want to include a demand growth exclusion, remove the italicized language.]
- (\underline{a}) Suboption C-1 for Option (a)(2)(iv)-C [This option retains the netting concept.]
- (\underline{a}) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major

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modification for a regulated NSR pollutant if it causes two types of emissions increases - a significant emissions increase (as defined in paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(a) Suboption C-2 for Option (a)(2)(iv)-C [This option eliminates the netting concept.]

 (\underline{a}) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes a significant emissions increase.

Suboption C-3 for Option (a)(2)(iv)-C [This option requires only a significant net emissions increase to trigger applicability.]

- (\underline{a}) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). If the project would not result in a significant emissions increase, but would result in a significant net emissions increase, then the project is a major modification. Also, if the project would result in a significant emissions increase, but would not result in a significant net emissions increase, then the project would not be a major modification.
- (\underline{b}) The emissions increase from the project is determined by taking the sum of the emissions increases from each emissions unit affected by the project. An emissions unit is considered to be affected by the project if an emissions increase from the unit would occur as a result of the project, regardless of whether a physical change or change in the method of operation will occur at the particular emissions unit.

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- $(\underline{c})(1)$ For each existing emissions unit affected by the project, the emissions increase is determined by taking the difference between the projected actual emissions, following completion of the project, and the baseline actual emissions. In determining the projected actual emissions, the owner or operator of the major stationary source:
- (A) Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and
- (B) Shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; and
- (C) Shall exclude, in calculating any increase in emissions that results from the particular project, for calculations involving an electric utility steam generating unit, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth.
- (2) In lieu of (c)(1), the owner or operator may elect to determine the emissions increase by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions.
- (\underline{d}) For each new emissions unit affected by the project, the emissions increase is equal to its potential to emit.
- (v) For any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements under paragraph (aa) of this section.
- (vi) An owner or operator undertaking a PCP shall comply with the requirements under paragraph (z) of this section.
- $(v)\$ For any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements under paragraph (aa) of this section.
- (vi) An owner or operator undertaking a PCP (as defined in paragraph (b)(32) of this section) shall comply with the requirements under paragraph (z) of this section.

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(vii) [These paragraphs (vii) and (viii) provided for permitting authorities who want to provide an actual-to-projected-actual applicability test for some provisions under the rule, but still want to retain the actual-to-potential test for other provisions. The permitting authority needs to specify to which paragraphs of 52.21(k) through (r) it seeks to apply the actual to potential test. If the permitting authority is only providing the actual to potential test, mark this paragraph "reserved."]

(vii) The requirements of paragraphs (k)(source impact analysis, (1)(air quality modeling), (m)(air quality analysis), (n)(source information), (o)(additional impact analyses), (p)(additional requirements related to Federal Class I areas), (q)(public participation), and (r)(source
obligation) of this section apply to the construction of any project that would be considered a major modification if emissions increases for each emissions unit affected by the project were determined by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions.

(viii) [If no paragraph (a)(2)(vii) has been included, do not include this paragraph.] No new project governed by section (a)(vii) of this section shall begin actual construction without a determination by the permitting authority that the requirements of section (a)(vii) have been met.

- (b) $\underline{\text{Definitions}}$. For the purposes of this section:
 - (1)(i) <u>Major stationary source</u> means:
- (\underline{a}) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland
- § 52.21(b) <u>Definitions</u>. For the purposes of this section:
- (1) (i) Major stationary source means:
- (\underline{a}) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland

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cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

- (\underline{b}) Notwithstanding the stationary source size specified in paragraph (b)(1)(i) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; or
- (\underline{c}) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source, if the changes would constitute a major stationary source by itself.
- (ii) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- (iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
- (\underline{a}) Coal cleaning plants (with thermal dryers);

 - (b) Kraft pulp mills;
 (c) Portland cement plants;
 (d) Primary zinc smelters;

 - (\underline{e}) Iron and steel mills;
- (f) Primary aluminum ore reduction plants;
- $\begin{array}{ll} (\underline{g}) & \text{Primary copper smelters;} \\ (\underline{h}) & \text{Municipal incinerators capable of} \end{array}$ charging more than 250 tons of refuse per day;
- (i) Hydrofluoric, sulfuric, or nitric acid plants;
 - (j) Petroleum refineries;
 - Lime plants; (k)

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cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

- (\underline{b}) For stationary sources other than those listed in paragraph $(b)(1)(i)(\underline{a})$ of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; or
- (\underline{c}) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source, if the changes would constitute a major stationary source by
- (ii) A major stationary source that is major for volatile organic compounds or oxides of nitrogen shall be considered major for ozone.
- (iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
- (<u>a</u>) Coal cleaning plants (with thermal dryers);
 - (<u>b</u>) Kraft pulp mills;
 - Portland cement plants; (C)
 - (\underline{d}) Primary zinc smelters;
 - (<u>e</u>) Iron and steel mills;
- (f) Primary aluminum ore reduction plants;

 - $\begin{array}{ll} (\underline{q}) & \text{Primary copper smelters;} \\ (\underline{h}) & \text{Municipal incinerators capable of} \end{array}$ charging more than 250 tons of refuse per day;
 - (\underline{i}) Hydrofluoric, sulfuric, or nitric acid plants;

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- Phosphate rock processing plants;
- Coke oven batteries; (m)
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
 - (p) Primary lead smelters;
 - (g) Fuel conversion plants;
 - (<u>r</u>) Sintering plants;
 - (\underline{s}) Secondary metal production plants;
- (<u>t</u>) Chemical process plants; (<u>u</u>) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat
- (\underline{v}) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - (\underline{w}) Taconite ore processing plants;
 - (x) Glass fiber processing plants;
 - (y) Charcoal production plants;
- (\underline{z}) Fossil fuel-fired steam electric plants of more that 250 million British thermal units per hour heat input, and
- (<u>aa</u>) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

(2)(i) $\underline{\text{Major modification}}$ means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section); and a significant net emissions increase of that pollutant from the major stationary source.

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- Phosphate rock processing plants;
- Coke oven batteries; (<u>m</u>)
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
 - (p) Primary lead smelters;
 - (g) Fuel conversion plants;
 - (<u>r</u>) Sintering plants;
 - (\underline{s}) Secondary metal production plants;
 - (\underline{t}) Chemical process plants;
 - (u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
 - (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - (\underline{w}) Taconite ore processing plants;
 - (\underline{x}) Glass fiber processing plants;
 - (y) Charcoal production plants;
 - (\underline{z}) Fossil fuel-fired steam electric plants of more that 250 million British thermal units per hour heat input, and (<u>aa</u>) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.
- (2)(i) Major modification. [Three options are presented here, one requiring both a significant emissions increase and a significant net emissions to trigger applicability, one requiring only a significant emissions increase to trigger applicability (this option eliminates netting), and the third requiring only a significant net emissions increase to trigger applicability.]
- (2)(i) Option (b)(2)(i)-A [Both significant emissions increase and significant net emissions increase required.]
- (2)(i) Major modification means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section); and a significant net emissions increase of that pollutant from the major stationary source.
- (2)(i) Option (b)(2)(i)-B [Only significant emissions increase required; netting eliminated.]
- (2)(i) Major modification means any physical change in or change in the

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method of operation of a major stationary source that would result in a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section) from the major stationary source.

(2)(i) Option (b)(2)(i)-C [Only significant net emissions increase.]

- (2)(i) <u>Major modification</u> means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of a regulated NSR pollutant from the major stationary source regardless of whether such change would result in a significant emissions increase.
- (ii) Any emissions increase that is significant for volatile organic compounds or for oxides of nitrogen shall be considered significant for ozone.
- (ii) Any significant emissions increase (as defined in paragraph (b)(40) of this section) from any emissions units or net emissions increase (as defined in paragraph (b)(3) of this section) at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.
- (iii) A physical change or change in the method of operation shall not include:
- $(\underline{a}\,)$ Routine maintenance, repair and replacement;
- (iii) A physical change or change in the method of operation shall not include:
- (<u>a</u>) Routine maintenance, repair and replacement. [Two options are presented. The two are the same except that under Option B, the permitting authority has created a list of routine activities for various source categories.]
- Option (b)(2)(iii)(a)-A: Routine maintenance, repair and replacement. In determining whether an activity at a facility constitutes routine maintenance, repair and replacement, the owner or operator shall consider the nature, extent, purpose, frequency, and cost of the work to be performed. Routine maintenance, repair and replacement activities are narrow in scope, do not result in increased capacity, occur with regular frequency, and involve limited expense;

Option (b)(2)(iii)(a)-B: Routine maintenance, repair and replacement. The permitting authority has published lists identifying activities that are "routine" and not "routine." For activities that are not listed, in determining whether an activity at a facility constitutes routine maintenance, repair and replacement, the owner or operator shall consider the nature, extent, purpose,

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- (\underline{b}) Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plant pursuant to the Federal Power Act;
- (\underline{c}) Use of an alternative fuel by reason of an order or rule under section 125 of the Act;
- (\underline{d}) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- (\underline{e}) Use of an alternative fuel or raw material by a stationary source which:
- $(\underline{1})$ The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166; or
- $(\underline{2})$ The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
- (\underline{f}) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166.
- (\underline{g}) Any change in ownership at a stationary source.
- (\underline{h}) The addition, replacement, or use of a PCP, as defined in paragraph (b)(32) of this section, at an existing emissions unit meeting the requirements of paragraph (z) of this section. A replacement control technology must provide more effective emission control than that of the replaced control technology to qualify for this exclusion.
- (\underline{i}) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration

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frequency, and cost of the work to be performed. Routine maintenance, repair and replacement activities are narrow in scope, do not result in increased capacity, occur with regular frequency, and involve limited expense;

- (\underline{b}) Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plant pursuant to the Federal Power Act;
- (\underline{c}) Use of an alternative fuel by reason of an order or rule under section 125 of the federal Clean Air Act;
- (\underline{d}) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- (\underline{e}) Use of an alternative fuel or raw material by a stationary source which:
- $(\underline{1})$ The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166; or
- $(\underline{2})$ The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
- (\underline{f}) A change that only consists of an increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166.
- (\underline{q}) Any change in ownership at a stationary source.
- (\underline{h}) The addition, replacement, or use of a PCP, as defined in paragraph (b)(32) of this section, at an existing emissions unit meeting the requirements of paragraph (z) of this section.
- (\underline{i}) Reserved. [Deleted exemption for temporary clean coal technology

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project, provided that the project
complies with:

- $(\underline{1})$ The State implementation plan for the State in which the project is located, and
- $(\underline{2})$ Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (j) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
- $(\underline{k}\,)$ The reactivation of a very clean coal-fired electric utility steam generating unit.
- (iv) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (aa) of this section for a PAL for that pollutant. Instead, the definition at paragraph (aa)(2)(viii) of this section shall apply.

- (3)(i) <u>Net emissions increase</u> means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
- (\underline{a}) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section; and
- (\underline{b}) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph (b)(3)(i)(\underline{b}) shall be determined as provided in paragraph (b)(48) of this section, except that paragraphs (b)(48)(i)(\underline{c}) and (b)(48)(ii)(d) of this section shall not

demonstration projects.]

- (j) Reserved. [Deleted exemption for permanent clean coal technology demonstration projects.]
- (\underline{k}) Reserved. [Deleted exemption for the reactivation of a very clean coalfired electric utility steam generating unit.]
- (iv) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (aa) of this section for a PAL for that pollutant. Instead, the definition at paragraph (aa)(2)(viii) of this section shall apply.
- (3) [Options for net emissions increase: If the permitting authority wants to provide for "netting," then use the language set forth below. If the permitting authority seeks to remove netting, then mark this paragraph "reserved."]
- (3)(i) <u>Net emissions increase</u> means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
- (\underline{a}) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section; and
- (\underline{b}) Any other increases and decreases in emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph $(b)(3)(i)(\underline{b})$ shall be determined as provided in paragraph (b)(48) of this section.

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apply.

- (ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
- (\underline{a}) The date five years before construction on the particular change commences; and
- $(\underline{b}\,)$ The date that the increase from the particular change occurs.

- (iii) An increase or decrease in actual emissions is creditable only if:
- (\underline{a}) The Administrator or other reviewing authority has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs; and
- (\underline{b}) The increase or decrease in emissions did not occur at a Clean Unit except as provided in paragraphs (x)(8) and (y)(10) of this section.
- (iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- (v) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(ii) [This paragraph addresses the meaning of "contemporaneous." Two options are presented. The first option retains EPA's scope of netting. The second option narrows the scope of netting to the period during which the project is constructed.]

(ii) Option (b)(3)(ii)-A:

- (ii) An increase or decrease in emissions is contemporaneous with the increase from the project only if it occurs between:
- (\underline{a}) The date five years before construction on the project commences; and
- (\underline{b}) The date that construction on the project is complete.

(ii) Option (b)(3)(ii)-B:

- (ii) An increase or decrease in emissions is contemporaneous with the increase from the project only if it occurs between:
- (\underline{a}) The date that construction on the project commences; and
- (\underline{b}) The date that construction on the project is complete.
- (iii) An increase or decrease in emissions is creditable only if the permitting authority or other reviewing authority has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in emissions from the particular change occurs.
- (iv) An increase or decrease in emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- (v) An increase in emissions is creditable to the extent that the new level of allowable emissions exceeds the baseline actual emissions for the

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- (vi) A decrease in actual emissions is creditable only to the extent that:
- (\underline{a}) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
- (\underline{b}) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
- (\underline{c}) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and
- (d) The decrease in actual emissions did not result from the installation of add-on control technology or application of pollution prevention practices that were relied on in designating an emissions unit as a Clean Unit under paragraph (y) of this section or under regulations approved pursuant to §51.165(d) or to §51.166(u) of this chapter. That is, once an emissions unit has been designated as a Clean Unit, the owner or operator cannot later use the emissions reduction from the air pollution control measures that the designation is based on in calculating the net emissions increase for another emissions unit (i.e., must not use that reduction in a "netting analysis" for another emissions unit). However, any new emission reductions that were not relied upon in a PCP excluded pursuant to paragraph (z) of this section or for a Clean Unit designation are creditable to the extent they meet the requirements in paragraph (z)(6)(iv) of this section for the PCP and paragraphs (x)(8) or (y)(10)of this section for a Clean Unit.

(vii) [Reserved]

- (viii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- (ix) Paragraph (b)(21)(ii) of this section shall not apply for determining creditable increases and decreases.

contemporaneous change.

- (vi) A decrease in emissions is creditable to the extent that:
- (\underline{a}) The baseline actual emissions exceeds the new level of allowable emissions;
- (\underline{b}) The new level of allowable emissions is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
- (\underline{c}) The decrease in emissions has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and
- (\underline{d}) The decrease in emissions did not result from the installation of add-on control technology or application of pollution prevention practices that were relied on in designating an emissions unit as a Clean Unit or a PCP.

(vii) [Reserved]

(viii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(ix) [Reserved]

(4) Potential to emit means the maximum

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- (4) <u>Potential to emit</u> means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.
- (5) <u>Stationary source</u> means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.
- (6) <u>Building</u>, <u>structure</u>, <u>facility</u>, <u>or</u> installation means all of the pollutantemitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two digit code) as described in the <u>Standard Industrial Classification</u> Manual, 1972, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).
- (7) Emissions unit means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(31) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) of this section.
- (i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

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capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable or enforceable as a practical matter. Secondary emissions do not count in determining the potential to emit of a stationary source.

- (5) <u>Stationary source</u> means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.
- (6) Building, structure, facility, or installation means all of the pollutantemitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).
- (7) Emissions unit means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(31) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) of this section.
- (i) A <u>new emissions unit</u> is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated. Any emissions unit that is constructed or installed for the purpose of replacing an existing unit, or any emissions unit that is relocated from another stationary source for the purpose of replacing an existing unit, shall be considered a new emissions unit at the time of replacement and until two years from the date such new unit commenced operation.
- (ii) An $\underline{\text{existing emissions unit}}$ is any emissions unit that is not a new

(ii) An existing emissions unit is any

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emissions unit that does not meet the requirements in paragraph (b)(7)(i) of this section.

- (8) <u>Construction</u> means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.
- (9) <u>Commence</u> as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:
- (i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- (ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- (10) <u>Necessary preconstruction approvals</u> or <u>permits</u> means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.
- (11) Begin actual construction means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those onsite activites other than preparatory activities which mark the initiation of the change.
- (12) Best available control technology means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of

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emissions unit.

- (8) <u>Construction</u> means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.
- (9) <u>Commence</u> as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:
- (i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- (ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- (10) <u>Necessary preconstruction approvals</u> <u>or permits</u> means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.
- (11) <u>Begin actual construction</u> means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those onsite activities other than preparatory activities which mark the initiation of the change.
- (12) Best available control technology means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or

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production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

- (13)(i) <u>Baseline concentration</u> means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
- (\underline{a}) The actual emissions, as defined in paragraph (b)(21) of this section, representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section; and
- (\underline{b}) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
- (ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
- (\underline{a}) Actual emissions, as defined in paragraph (b)(21) of this section, from any major stationary source on which construction commenced after the major source baseline date; and
- (\underline{b}) Actual emissions increases and decreases, as defined in paragraph (b)(21) of this section, at any

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available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the permitting authority determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

- (13)(i) <u>Baseline concentration</u> means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
- (\underline{a}) The actual emissions, as defined in paragraph (b)(21) of this section, representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section; and
- (\underline{b}) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
- (ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
- (\underline{a}) Actual emissions, as defined in paragraph (b)(21) of this section, from any major stationary source on which construction commenced after the major source baseline date; and
- (\underline{b}) Actual emissions increases and decreases, as defined in paragraph (b)(21) of this section, at any stationary source occurring after the

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stationary source occurring after the minor source baseline date.

- (14)(i) Major source baseline date means:
- (\underline{a}) In the case of particulate matter and sulfur dioxide, January 6, 1975, and
- (\underline{b}) In the case of nitrogen dioxide, February 8, 1988.
- (ii) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:
- (a) In the case of particulate matter and sulfur dioxide, August 7, 1977, and
- (\underline{b}) In the case of nitrogen dioxide, February 8, 1988.
- (iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
- (a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(i) (D) or (E) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21; and
- (b) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.
- (iv) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that the Administrator shall rescind a minor source baseline date where it can be shown, to the satisfaction of the Administrator, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM-10 emissions.

minor source baseline date.

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- (14)(i) Major source baseline date means:
- (\underline{a}) In the case of particulate matter and sulfur dioxide, January 6, 1975, and
- (b) In the case of nitrogen dioxide, February 8, 1988.
- (ii) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:
- (\underline{a}) In the case of particulate matter and sulfur dioxide, August 7, 1977, and
- (b) In the case of nitrogen dioxide, February 8, 1988.
- (iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
- (a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(i) (D) or (E) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21; and
- (b) [Note: if the permitting authority wants to eliminate netting, delete the word "net," italicized below.] In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.
- (iv) [Note: if the permitting authority wants to eliminate netting, delete the word "net," italicized below.] Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that the permitting authority shall rescind a minor source baseline date where it can be shown, to the satisfaction of the permitting authority, that the emissions increase from the major stationary source, or *net* emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM-10 emissions.

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- (15)(i) <u>Baseline area</u> means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1) (D) or (E) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 1 $\mu g/m^3$ (annual average) of the pollutant for which the minor source baseline date is established.
- (ii) Area redesignations under section 107(d)(1) (D) or (E) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:
- (\underline{a}) Establishes a minor source baseline date; or
- (\underline{b}) Is subject to 40 CFR 52.21 and would be constructed in the same state as the state proposing the redesignation.
- (iii) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that such baseline area shall not remain in effect if the Administrator rescinds the corresponding minor source baseline date in accordance with paragraph (b)(14)(iv) of this section.
- (16) Allowable emissions means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:
- (i) The applicable standards as set forth in 40 CFR parts 60 and 61;
- (ii) The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or
- (iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.
- (17) <u>Federally enforceable</u> means all limitations and conditions which are enforceable by the Administrator,

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- (v) Baseline dates established prior to [insert rule adoption date] will remain in effect.
- (15)(i) <u>Baseline area</u> means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1) (D) or (E) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than $1 \ \mu g/m^3$ (annual average) of the pollutant for which the minor source baseline date is established.
- (ii) Area redesignations under section 107(d)(1) (D) or (E) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:
- (\underline{a}) Establishes a minor source baseline date; or
- (\underline{b}) Is subject to 40 CFR 52.21 and would be constructed in the same state as the state proposing the redesignation.
- (iii) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that such baseline area shall not remain in effect if the permitting authority rescinds the corresponding minor source baseline date in accordance with paragraph (b)(14)(iv) of this section.
- (16) <u>Allowable emissions</u> means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:
- (i) The applicable standards as set forth in 40 CFR parts 60 and 61;
- (ii) The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or
- (iii) The emissions rate specified under any requirement or permit condition that is federally enforceable or enforceable as a practical matter, including those with a future compliance date.
- (17) Federally enforceable means all limitations and conditions which are enforceable by the permitting authority, including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within any applicable State

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including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

- (18) <u>Secondary emissions</u> means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.
- (i) Emissions from ships or trains coming to or from the new or modified stationary source; and
- (ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.
- (19) Innovative control technology means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.
- (20) <u>Fugitive emissions</u> means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- (21)(i) <u>Actual emissions</u> means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21)(ii) through (iv) of this section, except that this definition shall not

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implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

- (18) Secondary emissions means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.
- (i) Emissions from ships or trains coming to or from the new or modified stationary source; and
- (ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.
- (19) Innovative control technology means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.
- (20) <u>Fugitive emissions</u> means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- (21) (i) <u>Actual emissions</u> means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21)(ii) through (iv) of this section. This term appears in paragraph (b)(13), "Baseline concentration," and it is used for determining air quality impacts, for example NAAQS, PSD increments, and

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apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under paragraph (aa) of this section. Instead, paragraphs (b)(41) and (b)(48) of this section shall apply for those purposes.

- (ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- (iii) The Administrator may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (iv) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
- (22) <u>Complete</u> means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.
- (23) (i) <u>Significant</u> means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate

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AQRV's. It is not used in calculating whether a significant emissions increase has occurred, whether a net emissions increase has occurred [Note: if the definition of "net emissions increase" has not been included in the rule, eliminate the italicized language], in determining whether projected actual emissions have been exceeded, or for establishing a PAL under paragraph (aa) of this section.

- (ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The permitting authority may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- (iii) The permitting authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (iv) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
- (22) <u>Complete</u> means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.
- (23) (i) <u>Significant</u>. [Note: if the definition of "net emissions increase" has not been included in the rule, eliminate the italicized language.] <u>Significant</u> means, in reference to a significant emissions increase, a significant net emissions increase, or the potential of a stationary source or an emissions unit to emit a significant amount of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy Sulfur dioxide: 40 tpy

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Carbon monoxide: 100 tons per year (tpy) Nitrogen oxides: 40 tpy Sulfur dioxide: 40 tpy Particulate matter: 25 tpy of particulate matter emissions; 15 tpy of PM_{10} emissions Ozone: 40 tpy of volatile organic compounds Lead: 0.6 tpy Fluorides: 3 tpy Sulfuric acid mist: 7 tpy Hydrogen sulfide (H₂S): 10 tpy Total reduced sulfur (including H_2S): 10 Reduced sulfur compounds (including H2S): 10 tpy Municipal waste combustor organics (measured as total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans): 3.2×10^{-6} megagrams per year $(3.5 \times 10^{-6} \text{ tons per year})$. Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year) Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year) Municipal solid waste landfills emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year)

- (ii) <u>Significant</u> means, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that paragraph (b)(23)(i) of this section, does not list, any emissions rate.
- (iii) Notwithstanding paragraph (b)(23)(i) of this section, significant means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 μ g/m³, (24-hour average).
- (24) <u>Federal Land Manager</u> means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.
- (25) <u>High terrain</u> means any area having an elevation 900 feet or more above the base of the stack of a source.
- (26) $\frac{\text{Low terrain}}{\text{high terrain}}$ means any area other than

Particulate matter: 25 tpy of particulate matter emissions; 15 tpy of PM_{10} emissions Ozone: 40 tpy of volatile organic compounds, or 40 tpy of nitrogen oxides Lead: 0.6 tpy Fluorides: 3 tpy Sulfuric acid mist: 7 tpy Hydrogen sulfide (H₂S): 10 tpy Total reduced sulfur (including H₂S): 10 Reduced sulfur compounds (including H2S): 10 tpy Municipal waste combustor organics (measured as total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans): 3.2×10^{-6} megagrams per year $(3.5 \times 10^{-6} \text{ tons per year})$. Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year) Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year) Municipal solid waste landfills emissions (measured as nonmethane organic compounds): 45 megagrams per year (50

(ii) Reserved. [EPA intends to address the issue of significance levels for other regulated NSR pollutants, and accordingly, this provision should be revisited at that time.]

tons per year)

- (iii) [Note: if the definition of "net emissions increase" has not been included in the rule, eliminate the italicized language.] Notwithstanding paragraph (b)(23)(i) of this section, significant means any emissions rate or any net emissions increase of any regulated NSR pollutant associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 µg/m³, (24-hour average).
- (24) <u>Federal Land Manager</u> means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.
- (25) <u>High terrain</u> means any area having an elevation 900 feet or more above the base of the stack of a source.
- (26) $\underline{\text{Low terrain}}$ means any area other than high terrain.
- (27) <u>Indian Reservation</u> means any federally recognized reservation

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- (27) <u>Indian Reservation</u> means any federally recognized reservation established by Treaty, Agreement, executive order, or act of Congress.
- (28) <u>Indian Governing Body</u> means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self government.
- (29) Adverse impact on visibility means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.
- (30) <u>Volatile organic compounds (VOC)</u> is as defined in § 51.100(s) of this chapter.
- (31) Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
- (32) Pollution control project (PCP) means any activity, set of work practices or project (including pollution prevention as defined under paragraph (b)(39) of this section) undertaken at an existing emissions unit that reduces emissions of air pollutants from such unit. Such qualifying activities or projects can include the replacement or upgrade of an existing emissions control technology with a more effective unit. Other changes that may occur at the source are not considered part of the PCP if they are not necessary to reduce emissions through the PCP. Projects listed in paragraphs (b)(32)(i) through (vi) of this section are presumed to be environmentally beneficial pursuant to paragraph (z)(2)(i) of this section.

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established by Treaty, Agreement, executive order, or act of Congress.

- (28) <u>Indian Governing Body</u> means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self government.
- (29) Adverse impact on visibility means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.
- (30) <u>Volatile organic compounds (VOC)</u> is as defined in § 51.100(s) of this chapter.
- (31) Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
- (32) Pollution control project (PCP) means, at an existing emissions unit, any activity, set of work practices, or project (including pollution prevention as defined under paragraph (b)(39) of this section), the primary purpose of which is to reduce emissions of air pollutants from such unit. Such qualifying activities or projects can include the replacement or upgrade of an existing emissions control technology with a more effective unit. Such activities, work practices, or projects cannot include the replacement of an existing emissions unit with a newer or different unit, or the reconstruction of an existing emissions unit. Other changes that may occur at the source are not considered part of the PCP if they are not necessary to reduce emissions through the PCP. Projects listed in paragraphs (b)(32)(i) through (vi) of

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Projects not listed in these paragraphs may qualify for a case-specific PCP exclusion pursuant to the requirements of paragraphs (z)(2) and (z)(5) of this section.

- (i) Conventional or advanced flue gas desulfurization or sorbent injection for control of SO_2 .
- (ii) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for control of particulate matter or other pollutants.
- (iii) Flue gas recirculation, $low-NO_x$ burners or combustors, selective non-catalytic reduction, selective catalytic reduction, low emission combustion (for IC engines), and oxidation/absorption catalyst for control of NO_x .
- (iv) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, hydrocarbon combustion flares, biofiltration, absorbers and adsorbers, and floating roofs for storage vessels for control of volatile organic compounds or hazardous air pollutants. For the purpose of this section, "hydrocarbon combustion flare" means either a flare used to comply with an applicable NSPS or MACT standard (including uses of flares during startup, shutdown, or malfunction permitted under such a standard), or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide.

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this section carry the rebuttable presumption that they are environmentally beneficial pursuant to paragraph (z)(2)(i) of this section, and the permitting authority has the authority to rebut such presumption and determine that the project is not environmentally beneficial and the project does not qualify as a PCP. Projects not listed in these paragraphs may qualify for a casespecific PCP exclusion pursuant to the requirements of paragraphs (z)(2) and (z)(5) of this section.

- (i) Conventional or advanced flue gas desulfurization or sorbent injection for control of SO₂.
- (ii) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for control of particulate matter or other pollutants.
- (iii) Flue gas recirculation, $low-NO_x$ burners or combustors (except those that increase fuel-burning capacity), selective non-catalytic reduction, selective catalytic reduction, low emission combustion (for IC engines), and oxidation/absorption catalyst for control of NO_x .
- (iv) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, hydrocarbon combustion flares, biofiltration, absorbers and adsorbers, and floating roofs for storage vessels for control of volatile organic compounds or hazardous air pollutants. For the purpose of this section, "hydrocarbon combustion flare" means either a flare used to comply with an applicable NSPS or MACT standard (including uses of flares during startup, shutdown, or malfunction permitted under such a standard), or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide. Projects that involve the use of regenerative thermal oxidizers, catalytic oxidizers, or thermal incinerators for the control of gases that contain sulfur bearing compounds and that result in increases of sulfur dioxide or sulfuric acid mist by a significant amount (as defined in paragraph (b)(23) of this section) do not qualify as PCP's unless such oxidizer(s) or incinerator(s) are equipped with control devices that result in a removal efficiency of at least 90 percent of the sulfur bearing compounds.
- (v) Activities or projects undertaken to accommodate switching (or partially switching) to an inherently less

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- (v) Activities or projects undertaken
 to accommodate switching (or partially
 switching) to an inherently less
 polluting fuel, to be limited to the
 following fuel switches:
- (<u>a</u>) Switching from a heavier grade of fuel oil to a lighter fuel oil, or any grade of oil to 0.05 percent sulfur diesel (i.e., from a higher sulfur content #2 fuel or from #6 fuel, to CA 0.05 percent sulfur #2 diesel);
- (\underline{b}) Switching from coal, oil, or any solid fuel to natural gas, propane, or qasified coal;
- (\underline{c}) Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated wood, and other forms of "unclean" wood;
- (\underline{d}) Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content); and
- (\underline{e}) Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content).
- (vi) Activities or projects undertaken to accommodate switching from the use of one ozone depleting substance (ODS) to the use of a substance with a lower or zero ozone depletion potential (ODP,) including changes to equipment needed to accommodate the activity or project, that meet the requirements of paragraphs (b)(32)(vi)(\underline{a}) and (\underline{b}) of this section.
- (\underline{a}) The productive capacity of the equipment is not increased as a result of the activity or project.
- (\underline{b}) The projected usage of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS. To make this determination, follow the procedure in paragraphs $(b)(32)(vi)(\underline{b})(\underline{1})$ through $(\underline{4})$ of this section.
- $(\underline{1}\,)$ Determine the ODP of the substances by consulting 40 CFR part 82, subpart A, appendices A and B.
- $(\underline{2})$ Calculate the replaced ODP-weighted amount by multiplying the baseline actual usage (using the annualized average of any 24 consecutive months of usage within the past 10 years) by the ODP of the replaced ODS.
- $(\underline{3})$ Calculate the projected ODP-weighted amount by multiplying the projected actual usage of the new substance by its ODP.

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polluting fuel, to be limited to the following fuel switches:

- (\underline{a}) Switching from a higher sulfur fuel oil to 0.05 percent or lower sulfur fuel oil;
- (\underline{b}) Switching from coal, oil, or any solid fuel to natural gas, propane, or gasified coal;
- (\underline{c}) Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated wood, and other forms of "unclean" wood;
- (\underline{d}) Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content); and
- (\underline{e}) Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content).
- (vi) Activities or projects undertaken to accommodate switching from the use of one ozone depleting substance (ODS) to the use of a substance with a lower or zero ozone depletion potential (ODP,) including changes to equipment needed to accommodate the activity or project, that meet the requirements of paragraphs (b)(32)(vi)(\underline{a}), (\underline{b}), and (\underline{c}) of this section.
- (\underline{a}) The productive capacity of the equipment is not increased as a result of the activity or project.
- (\underline{b}) The projected usage of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS. To make this determination, follow the procedure in paragraphs $(b)(32)(vi)(\underline{b})(\underline{1})$ through $(\underline{4})$ of this section.
- $(\underline{1})$ Determine the ODP of the substances by consulting 40 CFR part 82, subpart A, appendices A and B.
- $(\underline{2})$ Calculate the replaced ODP-weighted amount by multiplying the baseline actual usage (using the annualized average of any 24 consecutive months of usage within the past 10 years) by the ODP of the replaced ODS.
- $(\underline{3})$ Calculate the projected ODP-weighted amount by multiplying the projected actual usage of the new substance by its ODP.
- $(\underline{4})$ If the value calculated in paragraph (b)(32)(vi)(b)(2) of this

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$(\underline{4})$ If the value calculated in paragraph $(b)(32)(vi)(\underline{b})(\underline{2})$ of this section is more than the value calculated in paragraph $(b)(32)(vi)(\underline{b})(\underline{3})$ of this section, then the projected use of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS.

(33) [Reserved]

- (34) <u>Clean coal technology</u> means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.
- (35) Clean coal technology demonstration project means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology", up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.
- (36) Temporary clean coal technology demonstration project means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plans for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (37)(i) Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other

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section is more than the value calculated in paragraph $(b)(32)(vi)(\underline{b})(\underline{3})$ of this section, then the projected use of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS.

- (\underline{c}) The activity or project undertaken does not involve switching from a non-VOC to a VOC ODS.
- (33) Reserved.
- (34) Reserved. [This definition is not needed if the permitting authority does not adopt exclusions for clean coal technology projects.]
- (35) Reserved. [This definition is not needed if the permitting authority does not adopt exclusions for clean coal technology projects.]

- (36) Reserved. [This definition is not needed if the permitting authority does not adopt exclusions for clean coal technology projects.]
- (37) Reserved. [This definition is not needed if the permitting authority does not adopt exclusions for clean coal technology projects.]

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technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

- (ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.
- (iii) The Administrator shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the Clean Air Act.
- (38) Reactivation of a very clean coalfired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:
- (i) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;
- (ii) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;
- (iii) Is equipped with low- NO_x burners prior to the time of commencement of operations following reactivation; and (iv) Is otherwise in compliance with the requirements of the Clean Air Act.
- (39) <u>Pollution prevention</u> means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process")

recycling" practices), energy recovery,

treatment, or disposal.

(40) <u>Significant emissions increase</u> means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant.

(38) Reserved. [This definition is not needed if the permitting authority does not adopt the exclusion for very clean coal-fired EUSGUs.]

- (39) <u>Pollution prevention</u> means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.
- (40) <u>Significant emissions increase</u> means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant.
- (41) [If the permitting authority wants

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(41)(i) Projected actual emissions means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a

major stationary source.
 (ii) In determining the projected
actual emissions under paragraph
 (b)(41)(i) of this section (before
beginning actual construction), the owner
or operator of the major stationary
source:

significant net emissions increase at the

- (\underline{a}) Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and
- (\underline{b}) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions; and
- (\underline{c}) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or
- (\underline{d}) In lieu of using the method set out in paragraphs (a)(41)(ii)(\underline{a}) through (\underline{c}) of this section, may elect to use the emissions unit's potential to emit, in tons per year, as defined under paragraph (b)(4) of this section.

to adopt the actual-to-potential test in all circumstances, then this definition isn't needed, and the paragraph should be marked "reserved."]

(41) <u>Projected actual emissions</u> means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant.

(42) [Two options are presented. If the permitting authority does not want to adopt a Clean Unit provision, choose

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Option (b)(42)-A. Otherwise, Choose Option (b)(42)-B.]

Option (b)(42)-A:

(42) Reserved.

Option (b)(42)-B:

(42) <u>Clean Unit</u> means any emissions unit that qualifies as a Clean Unit pursuant to paragraph (x) of this section.

- (42) Clean Unit means any emissions unit that has been issued a major NSR permit that requires compliance with BACT or LAER, is complying with such BACT/LAER requirements, and qualifies as a Clean Unit pursuant to paragraph (x) of this section; or any emissions unit that has been designated by the Administrator as a Clean Unit, based on the criteria in paragraphs (y)(3)(i) through (iv) of this section; or any emissions unit that has been issued a major NSR permit that requires compliance with BACT or LAER, is complying with such BACT/LAER requirements, and qualifies as a Clean Unit pursuant to regulations approved into the State Implementation Plan in accordance with §51.165(c) or §51.166(u) of this chapter; or any emissions unit that has been designated by the reviewing authority as a Clean Unit in accordance with regulations approved into the plan to carry out §51.165(d) or §51.166(u) of this chapter.
- (43) <u>Prevention of Significant</u>
 <u>Deterioration (PSD) program</u> means the
 EPA-implemented major source
 preconstruction permit programs under
 this section or a major source
 preconstruction permit program that has
 been approved by the Administrator and
 incorporated into the State
 Implementation Plan pursuant to §51.166
 of this chapter to implement the
 requirements of that section. Any permit
 issued under such a program is a major
 NSR permit.
- (44) <u>Continuous emissions monitoring</u> <u>system (CEMS)</u> means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.
- (45) <u>Predictive emissions monitoring</u> <u>system (PEMS)</u> means all of the equipment necessary to monitor process and control device operational parameters (for

(43) Reserved.

- (44) <u>Continuous emissions monitoring</u>
 <u>system (CEMS)</u> means all of the equipment
 that may be required to meet the data
 acquisition and availability requirements
 of this section, to sample, condition (if
 applicable), analyze, and provide a
 record of emissions on a continuous
 basis.
- (45) <u>Predictive emissions monitoring</u> <u>system (PEMS)</u> means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary

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example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

- (46) Continuous parameter monitoring system (CPMS) means all of the equipment necessary to meet the data acquisition and availability requirements of this section, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.
- (47) <u>Continuous emissions rate</u>
 <u>monitoring system (CERMS)</u> means the total
 equipment required for the determination
 and recording of the pollutant mass
 emissions rate (in terms of mass per unit
 of time).
- (48) <u>Baseline actual emissions</u> means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (b)(48)(i) through (iv) of this section.
- (i) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
- $(\underline{a})\,$ The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
- (\underline{b}) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
- (\underline{c}) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the

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voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

- (46) <u>Continuous parameter monitoring</u> <u>system (CPMS)</u> means all of the equipment necessary to meet the data acquisition and availability requirements of this section, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.
- (47) <u>Continuous emissions rate</u> <u>monitoring system (CERMS)</u> means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).
- (48) <u>Baseline actual emissions</u> means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (b)(48)(i) through (iii) of this section.

(i) Reserved

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emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant. (\underline{d}) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph (b)(48)(i)(\underline{b}) of this section.

(ii) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Administrator for a permit required under this section or by the reviewing authority for a permit required by a plan, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

(ii) [Two options are presented. Under either option, the standard baseline would be the two consecutive calendar years immediately prior to the year a complete permit application is received by the permitting authority. Under Option (b)(48)(i)-A, the permitting authority may authorize the use of a more representative time period within the past 5 years. Under Option (b)(48)(i)-B, the permitting authority can establish a baseline based upon the highest 24 months of production within the past 5 years.]

(ii) Option (b)(48)(i)-A:

(ii) For any existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the two consecutive calendar years immediately prior to the year a complete permit application is received by the permitting authority. The permitting authority may allow the use of a different 24 month period within the last 5 years upon a determination that it is more representative of normal source operations.

(ii) Option (b)(48)(i)-B:

(ii) For any existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the two consecutive calendar years immediately prior to the year a complete permit application is received by the permitting authority. Alternatively, the permitting authority may establish the baseline actual emissions by calculating the average rate, in tons per year, based on current emissions data and the unit's

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- (\underline{a}) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
- (\underline{b}) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.
- (c) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of this chapter, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of $\S51.165(a)(3)(ii)(G)$ of this chapter.
- (\underline{d}) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
- (\underline{e}) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraphs (b)(48)(ii)(\underline{b}) and (c) of this section.
 - (iii) For a new emissions unit, the

utilization during the consecutive 24 month period of highest production from the source during the five year period immediately preceding when the owner or operator begins actual construction of the project, or the date a complete permit application is received by the permitting authority, whichever is earlier.

- (\underline{a}) (\underline{e}) [The following subparagraphs apply to either of the options for Paragraph (b)(48)(i).]
- (\underline{a}) The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.
- (\underline{b}) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
- (\underline{c}) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period.

- (\underline{d}) When a project involves multiple emissions units or multiple regulated NSR pollutants, or both, only one consecutive 24-month period must be used to determine the baseline actual emissions for all pollutants and for all the emissions units affected by the project.
- (\underline{e}) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraphs (b)(48)(ii)(b) and (c) of this section.

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baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(iv) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (b)(48)(i) of this section, for other existing emissions units in accordance with the procedures contained in paragraph (b)(48)(ii) of this section, and for a new emissions unit in accordance with the procedures contained in paragraph (b)(48)(iii) of this section.

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- (iii) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero.
- (iv) Baseline actual emissions shall be determined by measurement, calculations, estimations, and record keeping in the order of the following preferences:
 - (a) Monitoring Systems
 - (1) Continuous Emission Monitoring System (CEM) data integrated to annual emissions using flow meters and conversion factors.
 - (2) Predictive Emission Monitoring
 System (PEMS)
 - (b) Other Measurements and Calculations
 - (1) Stack emissions
 - (A) Determine hourly emissions by stack emission testing,
 - (B) Determine annual operating hours using hour meter records, and
 - (C) Calculate annual emissions using hourly emissions and annual operating hours,

OR

- (D) Determine emissions per heat input by stack emission testing,
- (E) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (F) Calculate annual emissions using emissions per heat input and annual heat input.
- (2) Mass balance
- (A) Determine the amount of materials used through measurements in the process,
- (B) Calculate emissions per mass of material used using mass balance techniques,
- (C) Determine amount of material used in a year, and
- (D) Calculate annual emissions using emissions per mass of material and

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amount of material used in a year.

- (3) Emission Factors
- (A) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions,
- (B) Determine annual operating hours using hour meter records, and
- (C) Calculate annual emissions using hourly emissions and annual operating hours,

OR

- (D) Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit,
- (E) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (F) Calculate annual emissions using emissions per heat input and annual heat input.
- (c) Recordkeeping: Instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records (such as production records, fuel consumption records, fuel purchase receipts, laboratory reports on fuel analysis, third party records such as electric bills, etc.)
 - (1) Determine hourly emissions using stack emission tests, mass balance or emission factors,
 - (2) Determine annual hours of operation using production records, etc.,
 - (3) Calculate annual emissions using hourly emissions and annual hours of operation, or
 - (4) Determine emissions per heat input unit using stack emission tests, mass balance or emission factors,
 - (5) Determine amount of fuel combusted in a year records and calculate annual heat input, and
 - (6) Calculate annual emissions using emissions per heat input and annual heat input.

(49) Reserved. [Reserved by EPA.]

(49) [Reserved]

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- (50) <u>Regulated NSR pollutant</u>, for purposes of this section, means the following:
- (i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds are precursors for ozone);
- (ii) Any pollutant that is subject to
 any standard promulgated under section
 111 of the Act;
- (iii) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or
- (iv) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.
- (51) Reviewing authority means the State air pollution control agency, local agency, other State agency, Indian tribe, or other agency authorized by the Administrator to carry out a permit program under §51.165 and §51.166 of this chapter, or the Administrator in the case of EPA-implemented permit programs under this section.
- (52) <u>Project</u> means a physical change in, or change in the method of operation of, an existing major stationary source.
- (53) <u>Lowest achievable emission rate</u> (<u>LAER</u>) is as defined in §51.165(a)(1)(xiii) of this chapter.

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- (50) <u>Regulated NSR pollutant</u>, for purposes of this section, means the following:
 - (i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by United States Environmental Protection Agency(e.g., volatile organic compounds are precursors for ozone);
- (ii) Any pollutant that is subject to any standard promulgated under section 111 of the Act;
- (iii) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or
- (iv) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.
- (51) <u>Permitting authority</u> means [include definition appropriate for the jurisdiction].
- (52) <u>Project</u> means the set of related physical changes, or changes in the method of operation, that comprise a program of construction at a stationary source, to be completed within a reasonable time. Such set shall not include physical changes or changes in the method of operation specified in paragraph (b)(2)(iii) of this section.
- (53) <u>Lowest achievable emission rate</u>
 (<u>LAER</u>) means, for any source, the more stringent rate of emissions based on the following:
- (A) The most stringent emissions limitation which is contained in the implementation plan of any State for such class or category of stationary source, unless the owner or operator of the proposed stationary source

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demonstrates that such limitations are not achievable; or (B) The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within or stationary source. In no event shall the application of the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance. (54) Reasonably available control (54) Reasonably available control technology (RACT) is as defined in 40 $\underline{\text{technology (RACT)}}$ is as defined in C.F.R. §51.100(o). §51.100(o) of this chapter. (55) <u>Calendar Year Emissions</u> means the rate of emissions of an NSR pollutant, in tons per year, from an emissions unit during a calendar year.

(c) Ambient air increments. In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

§ 52.21(c) Ambient air increments. In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)	Pollutant	Maximum allowable increase (micrograms per cubic meter)
Class I		Class I	
Particulate matter:		Particulate matter:	_
PM-10, annual arithmetic mean	4	PM-10, annual arithmetic mean	4
PM-10, 24-hr maximum .	8	PM-10, 24-hr maximum .	8
Sulfur dioxide:		Sulfur dioxide:	
Annual arithmetic mean	2	Annual arithmetic mean	2
24-hr maximum	5	24-hr maximum	5
3-hr maximum	25	3-hr maximum	25
Nitrogen dioxide		Nitrogen dioxide	
Annual arithmetic mean	2.5	Annual arithmetic mean	2.5
Class II		Class II	

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Particulate matter:		Particulate matter:	
PM-10, annual arithmetic mean	17	PM-10, annual arithmetic mean	17
PM-10, 24-hr maximum .	30	PM-10, 24-hr maximum .	30
Sulfur dioxide:		Sulfur dioxide:	
Annual arithmetic mean	20	Annual arithmetic mean	20
24-hr maximum	91	24-hr maximum	91
3-hr maximum	512	3-hr maximum	512
Nitrogen dioxide		Nitrogen dioxide	_
Annual arithmetic mean	25	Annual arithmetic mean	25
Class III		Class III	
Particulate matter:		Particulate matter:	_
PM-10, annual arithmetic mean	34	PM-10, annual arithmetic mean	34
PM-10, 24-hr maximum .	60	PM-10, 24-hr maximum .	60
Sulfur dioxide:		Sulfur dioxide:	
Annual arithmetic mean	40	Annual arithmetic mean	40
24-hr maximum	182	24-hr maximum	182
3-hr maximum	700	3-hr maximum	700
Nitrogen dioxide		Nitrogen dioxide	
Annual arithmetic mean	50	Annual arithmetic mean	50

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

- (d) Ambient air ceilings. No concentration of a pollutant shall exceed:
- (1) The concentration permitted under the national secondary ambient air quality standard, or
- (2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.
- (e) <u>Restrictions on area</u> <u>classifications</u>. (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

- § 52.21(d) <u>Ambient air ceilings</u>. No concentration of a pollutant shall exceed:
- (1) The concentration permitted under the national secondary ambient air quality standard, or
- (2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

§ 52.21(e) <u>Restrictions on area</u> <u>classifications</u>. (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

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- (i) International parks,
- (ii) National wilderness areas which exceed 5,000 acres in size,
- (iii) National memorial parks which exceed 5,000 acres in size, and
- (iv) National parks which exceed 6,000 acres in size.
- (2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.
- (3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.
- (4) The following areas may be redesignated only as Class I or II:
- (i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
- (ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
 - (f) [Reserved]
- (g) <u>Redesignation</u>. (1) All areas (except as otherwise provided under paragraph (e) of this section) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.
- (2) The State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II provided that:
- (i) At least one public hearing has been held in accordance with procedures established in § 51.102 of this chapter;
- (ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(iii) A discussion of the reasons for

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- (i) International parks,
- (ii) National wilderness areas which exceed 5,000 acres in size,
- (iii) National memorial parks which exceed 5,000 acres in size, and
- (iv) National parks which exceed 6,000 acres in size.
- (2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.
- (3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.
- (4) The following areas may be redesignated only as Class I or II:
- (i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
- (ii) A national park or national
 wilderness area established after August
 7, 1977, which exceeds 10,000 acres in
 size.
- § 52.21(f) Reserved. [Reserved by EPA.]
- § 52.21(g) Redesignation.

[States should include their own rules regarding redesignation here.]

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the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

- (iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and
- (v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.
- (3) Any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if--
- (i) The redesignation would meet the requirements of paragraph (g)(2) of this section;
- (ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation:
- (iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and
- (iv) Any permit application for any major stationary source or major

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modification, subject to review under paragraph (1) of this section, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

- (4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III: Provided, That:
- (i) The Indian Governing Body has followed procedures equivalent to those required of a State under paragraphs (g)(2), (g)(3)(iii), and (g)(3)(iv) of this section; and
- (ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.
- (5) The Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.
- (6) If the Administrator disapproves any proposed redesignation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.
- (h) Stack heights. (1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by-
- (i) So much of the stack height of any source as exceeds good engineering practice, or
 - (ii) Any other dispersion technique.
- (2) Paragraph (h)(1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

- § 52.21(h) <u>Stack heights</u>. (1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by--
- (i) So much of the stack height of any source as exceeds good engineering practice, or
 - (ii) Any other dispersion technique.
- (2) Paragraph (h)(1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

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(i) Exemptions.

- (1) The requirements of paragraphs (j) through (r) of this section shall not apply to a particular major stationary source or major modification, if;
- (i) Construction commenced on the source or modification before August 7, 1977. The regulations at 40 CFR 52.21 as in effect before August 7, 1977, shall govern the review and permitting of any such source or modification; or
- (ii) The source or modification was subject to the review requirements of 40 CFR 52.21(d)(1) as in effect before March 1, 1978, and the owner or operator:
- (<u>a</u>) Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978;
- (\underline{b}) Commenced construction before March 19, 1979; and
- (\underline{c}) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or
- (iii) The source or modification was subject to 40 CFR 52.21 as in effect before March 1, 1978, and the review of an application for approval for the stationary source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978; or
- (iv) The source or modification was not subject to 40 CFR 52.21 as in effect before March 1, 1978, and the owner or operator:
- (\underline{a}) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before March 1, 1978;
- (\underline{b}) Commenced construction before March 19, 1979; and
- (\underline{c}) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or
- (v) The source or modification was not subject to 40 CFR 52.21 as in effect on June 19, 1978 or under the partial stay

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§ 52.21(i) Exemptions.

- (1) The requirements of paragraphs (j) through (r) of this section shall not apply to a particular major stationary source or major modification, if;
- (i) Construction commenced on the source or modification before August 7, 1977. The regulations at 40 CFR 52.21 as in effect before August 7, 1977, shall govern the review and permitting of any such source or modification; or
- (ii) The source or modification was subject to the review requirements of 40 CFR 52.21(d)(1) as in effect before March 1, 1978, and the owner or operator:
- (<u>a</u>) Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978;
- (\underline{b}) Commenced construction before March 19, 1979; and
- (\underline{c}) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or
- (iii) The source or modification was subject to 40 CFR 52.21 as in effect before March 1, 1978, and the review of an application for approval for the stationary source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978; or
- (iv) The source or modification was not subject to 40 CFR 52.21 as in effect before March 1, 1978, and the owner or operator:
- (\underline{a}) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before March 1, 1978;
- (\underline{b}) Commenced construction before March 19, 1979; and
- (\underline{c}) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or
- (v) The source or modification was not subject to 40 CFR 52.21 as in effect on June 19, 1978 or under the partial stay

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of regulations published on February 5, 1980 (45 FR 7800), and the owner or operator:

- (\underline{a}) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before August 7, 1980;
- (\underline{b}) Commenced construction within 18 months from August 7, 1980, or any earlier time required under the applicable State Implementation Plan; and
- (\underline{c}) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or
- (vi) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the governor of the state in which the source or modification would be located requests that it be exempt from those requirements; or
- (vii) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:
- (\underline{a}) Coal cleaning plants (with thermal dryers);
 - (\underline{b}) Kraft pulp mills;
 - (c) Portland cement plants;
 - (\underline{d}) Primary zinc smelters;
 - (\underline{e}) Iron and steel mills;
- (\underline{f}) Primary aluminum ore reduction plants;
 - (g) Primary copper smelters;
- (\underline{h}) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (\underline{i}) Hydrofluoric, sulfuric, or nitric acid plants;
 - (\underline{j}) Petroleum refineries;
 - (\underline{k}) Lime plants;
 - $(\overline{\underline{1}})$ Phosphate rock processing plants;
 - (<u>m</u>) Coke oven batteries;
 - (n) Sulfur recovery plants;
- (0) Carbon black plants (furnace process);
 - (p) Primary lead smelters;
 - (g) Fuel conversion plants;
 - (r) Sintering plants;
 - (\underline{s}) Secondary metal production plants;
 - (\underline{t}) Chemical process plants;
- (\underline{u}) Fossil-fuel boilers (or combination thereof) totaling more than 250 million

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of regulations published on February 5, 1980 (45 FR 7800), and the owner or operator:

- (\underline{a}) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before August 7, 1980;
- (\underline{b}) Commenced construction within 18 months from August 7, 1980, or any earlier time required under the applicable State Implementation Plan; and
- (\underline{c}) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or
- (vi) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the governor of the state in which the source or modification would be located requests that it be exempt from those requirements; or
- (vii) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:
- (\underline{a}) Coal cleaning plants (with thermal dryers);
 - (b) Kraft pulp mills;
 - (c) Portland cement plants;
 - (d) Primary zinc smelters;
 - (e) Iron and steel mills;
 - $(\underline{\underline{f}})$ Primary aluminum ore reduction plants;
 - (<u>q</u>) Primary copper smelters;
- (\underline{h}) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (\underline{i}) Hydrofluoric, sulfuric, or nitric acid plants;
 - (\underline{j}) Petroleum refineries;
 - (\underline{k}) Lime plants;
 - (1) Phosphate rock processing plants;
 - (<u>m</u>) Coke oven batteries;
 - (n) Sulfur recovery plants;
- (\underline{o}) Carbon black plants (furnace process);
 - (p) Primary lead smelters;
 - (g) Fuel conversion plants;
 - (r) Sintering plants;
 - (\underline{s}) Secondary metal production plants;
 - (\underline{t}) Chemical process plants;
- (\underline{u}) Fossil-fuel boilers (or combination thereof) totaling more than 250 million

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British thermal units per hour heat input;

- (\underline{v}) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - (\underline{w}) Taconite ore processing plants;
 - (\underline{x}) Glass fiber processing plants;
 - (\underline{y}) Charcoal production plants;
- (\underline{z}) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
- (\underline{aa}) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act; or
- (viii) The source is a portable stationary source which has previously received a permit under this section, and
- (\underline{a}) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary; and
- (\underline{b}) The emissions from the source would not exceed its allowable emissions; and
- (\underline{c}) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and
- (\underline{d}) Reasonable notice is given to the Administrator prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the Administrator not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the Administrator.
- (ix) The source or modification was not subject to § 52.21, with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator:
- (<u>a</u>) Obtained all final Federal, State, and local preconstruction approvals or permits necessary under the applicable State implementation plan before July 31, 1987;
- (\underline{b}) Commenced construction within 18 months after July 31, 1987, or any earlier time required under the State implementation plan; and
- (\underline{c}) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable period of time.
- (x) The source or modification was subject to 40 CFR 52.21, with respect to

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British thermal units per hour heat input;

- (\underline{v}) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - (\underline{w}) Taconite ore processing plants;
 - (\underline{x}) Glass fiber processing plants;
 - (y) Charcoal production plants;
- (\underline{z}) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
- (<u>aa</u>) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act; or
- (viii) The source is a portable stationary source which has previously received a permit under this section, and
- (\underline{a}) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary; and
- (\underline{b}) The emissions from the source would not exceed its allowable emissions; and
- (\underline{c}) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and
- (\underline{d}) Reasonable notice is given to the permitting authority prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the permitting authority not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the permitting authority.
- (ix) The source or modification was not subject to § 52.21, with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator:
- (\underline{a}) Obtained all final Federal, State, and local preconstruction approvals or permits necessary under the applicable State implementation plan before July 31, 1987;
- (\underline{b}) Commenced construction within 18 months after July 31, 1987, or any earlier time required under the State implementation plan; and
- (\underline{c}) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable period of time.
- (x) The source or modification was subject to 40 CFR 52.21, with respect to

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particulate matter, as in effect before July 31, 1987 and the owner or operator submitted an application for a permit under this section before that date, and the Administrator subsequently determines that the application as submitted was complete with respect to the particular matter requirements then in effect in the section. Instead, the requirements of paragraphs (j) through (r) of this section that were in effect before July 31, 1987 shall apply to such source or modification.

- (2) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under section 107 of the Act.
- (3) The requirements of paragraphs (k), (m) and (o) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:
- (i) Would impact no Class I area and no area where an applicable increment is known to be violated, and
 - (ii) Would be temporary.
- (4) The requirements of paragraphs (k), (m) and (o) of this section as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of best available control technology would be less than 50 tons per year.
- (5) The Administrator may exempt a stationary source or modification from the requirements of paragraph (m) of this section, with respect to monitoring for a particular pollutant if:
- (i) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any

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particulate matter, as in effect before July 31, 1987 and the owner or operator submitted an application for a permit under this section before that date, and the permitting authority subsequently determines that the application as submitted was complete with respect to the particular matter requirements then in effect in the section. Instead, the requirements of paragraphs (j) through (r) of this section that were in effect before July 31, 1987 shall apply to such source or modification.

- (2) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under section 107 of the Act.
- (3) The requirements of paragraphs (k), (m) and (o) of this section shall not apply to a major stationary source or major modification that would impact no Class I area and no area where an applicable increment is known to be violated, and would be temporary.
- (4) The requirements of paragraphs (k), (m) and (o) of this section as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of best available control technology would be less than 50 tons per year.
- (5) The permitting authority may exempt a stationary source or modification from the requirements of paragraph (m) of this section, with respect to monitoring for a particular pollutant if:
- (i) [Note: if the definition of "net emissions increase" has not been included in the rule, eliminate the italicized language.]
- (i) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from

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area, air quality impacts less than the the n following amounts:

Carbon monoxide--575 $\mu g/m^3$, 8-hour average;

Nitrogen dioxide--14 $\mu g/m^3$, annual average;

Particulate matter--10 $\mu g/m^3$ of PM-10, 24-hour average;

Sulfur dioxide--13 μ g/ m^3 , 24-hour average; Ozone;

Lead--0.1 $\mu g/m^3$, 3-month average; Fluorides--0.25 $\mu g/m^3$, 24-hour average; Total reduced sulfur--10 $\mu g/m^3$, 1-hour average;

Hydrogen sulfide--0.2 μg/m³, 1-hour average;

Reduced sulfur compounds--10 $\mu g/m^3$, 1-hour average; or

- (ii) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in paragraph (i)(8)(i) of this section, or the pollutant is not listed in paragraph (i)(8)(i) of this section.
- (6) The requirements for best available control technology in paragraph (j) of this section and the requirements for air quality analyses in paragraph (m)(1) of this section, shall not apply to a particular stationary source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submitted an application for a permit under those regulations before August 7, 1980, and the Administrator subsequently determines that the application as submitted before that date was complete. Instead, the requirements at 40 CFR 52.21(j) and (n) as in effect on June 19, 1978 apply to any such source or modification.
- (7)(i) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Administrator subsequently determines that the application as submitted before that date was complete with respect to the requirements of this section other than those in paragraphs (m)(1) (ii) through (iv) of this section, and with respect to the requirements for such analyses at 40 CFR 52.21(m)(2) as in effect on June 19, 1978. Instead, the latter requirements

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the modification would cause, in any
area, air quality impacts less than the
following amounts:

Carbon monoxide--575 $\mu g/m^3$, 8-hour average;

Nitrogen dioxide--14 μ g/m³, annual average;

Particulate matter--10 $\mu g/m^3$ of PM-10, 24-hour average;

Sulfur dioxide--13 $\mu g/m^3$, 24-hour average; Ozone;²

Lead--0.1 $\mu g/m^3$, 3-month average; Fluorides--0.25 $\mu g/m^3$, 24-hour average; Total reduced sulfur--10 $\mu g/m^3$, 1-hour

average; Hydrogen sulfide--0.2 µg/m³, 1-hour average;

Reduced sulfur compounds--10 $\mu g/m^3$, 1-hour average; or

- (ii) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in paragraph (i)(8)(i) of this section, or the pollutant is not listed in paragraph (i)(8)(i) of this section.
- (6) The requirements for best available control technology in paragraph (j) of this section and the requirements for air quality analyses in paragraph (m)(1) of this section, shall not apply to a particular stationary source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submitted an application for a permit under those regulations before August 7, 1980, and the permitting authority subsequently determines that the application as submitted before that date was complete. Instead, the requirements at 40 CFR 52.21(j) and (n) as in effect on June 19, 1978 apply to any such source or modification.
- (7)(i) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the permitting authority subsequently determines that the application as submitted before that date was complete with respect to the requirements of this section other than those in paragraphs (m)(1) (ii) through (iv) of this section, and with respect to the requirements for such analyses at 40 CFR 52.21(m)(2) as in effect on June 19, 1978. Instead, the latter requirements

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shall apply to any such source or modification.

- (ii) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was not subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements in paragraphs (m)(1) (ii) through (iv).
- (8)(i) At the discretion of the Administrator, the requirements for air quality monitoring of PM_{10} in paragraphs (m)(1) (i)--(iv) of this section may not apply to a particular source or modification when the owner or operator of the source or modification submits an application for a permit under this section on or before June 1, 1988 and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements for monitoring particulate matter in paragraphs (m)(1) (i)--(iv).
- (ii) The requirements for air quality monitoring pf PM_{10} in paragraphs (m)(1), (ii) and (iv) and (m)(3) of this section shall apply to a particular source or modification if the owner or operator of the source or modification submits an application for a permit under this section after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under paragraph (m)(1)(viii) of this section, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over a shorter period.
- (9) The requirements of paragraph (k)(2) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under this section before the provisions

shall apply to any such source or modification.

- (ii) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was not subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the permitting authority subsequently determines that the application as submitted before that date was complete, except with respect to the requirements in paragraphs (m)(1) (ii) through (iv).
- (8)(i) At the discretion of the permitting authority, the requirements for air quality monitoring of PM_{10} in paragraphs (m)(1) (i)--(iv) of this section may not apply to a particular source or modification when the owner or operator of the source or modification submits an application for a permit under this section on or before June 1, 1988 and the permitting authority subsequently determines that the application as submitted before that date was complete, except with respect to the requirements for monitoring particulate matter in paragraphs (m)(1) (i)--(iv).
- (ii) The requirements for air quality monitoring pf PM_{10} in paragraphs (m)(1), (ii) and (iv) and (m)(3) of this section shall apply to a particular source or modification if the owner or operator of the source or modification submits an application for a permit under this section after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under paragraph (m)(1)(viii) of this section, except that if the permitting authority determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over a shorter period.
- (9) The requirements of paragraph (k)(2) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increase

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embodying the maximum allowable increase took effect as part of the applicable implementation plan and the Administrator subsequently determined that the application as submitted before that date was complete.

(10) The requirements in paragraph (k)(2) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM-10 if (i) the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increases for PM-10took effect in an implementation plan to which this section applies, and (ii) the Administrator subsequently determined that the application as submitted before that date was otherwise complete. Instead, the requirements in paragraph (k)(2) shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

(j) Control technology review.

- (1) A major stationary source or major modification shall meet each applicable emissions limitation under the State Implementation Plan and each applicable emissions standard and standard of performance under 40 CFR parts 60 and 61.
- (2) A new major stationary source shall apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts.
- (3) A major modification shall apply best available control technology for each regulated NSR pollutant for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.
- (4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of

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took effect as part of the applicable implementation plan and the permitting authority subsequently determined that the application as submitted before that date was complete.

(10) The requirements in paragraph (k)(2) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM-10 if (i) the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increases for PM-10 took effect in an implementation plan to which this section applies, and (ii) the permitting authority subsequently determined that the application as submitted before that date was otherwise complete. Instead, the requirements in paragraph (k)(2) shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

§ 52.21(j) Control technology review.

- (1) A major stationary source or major modification shall meet each applicable emissions limitation under the State Implementation Plan and each applicable emissions standard and standard of performance under 40 CFR parts 60, 61 and 63.
- (2) A new major stationary source shall apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts.
- (3) A major modification shall apply best available control technology (BACT) for each regulated NSR pollutant for which the modification is major. BACT shall be applied for each emissions unit at which an emissions increase would occur as a result of a physical change or change in the method of operation at the unit.
- (4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the

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best available control technology for the source.

- (k) <u>Source impact analysis</u>. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:
- (1) Any national ambient air quality standard in any air quality control region; or
- (2) Any applicable maximum allowable increase over the baseline concentration in any area.

(1) Air quality models.

- (1) All estimates of ambient concentrations required under this paragraph shall be based on applicable air quality models, data bases, and other requirements specified in appendix W of part 51 of this chapter (Guideline on Air Quality Models).
- (2) Where an air quality model specified in appendix W of part 51 of this chapter (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific state program. Written approval of the Administrator must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures developed in accordance with paragraph (q) of this section.

(m) Air quality analysis --

(1) Preapplication analysis.

- (i) Any application for a permit under this section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:
 - (\underline{a}) For the source, each pollutant that

source

- § 52.21(k) <u>Source impact analysis</u>. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:
- (1) Any national ambient air quality standard in any air quality control region; or
- (2) Any applicable maximum allowable increase over the baseline concentration in any area.

§ 52.21(1) Air quality models.

- (1) All estimates of ambient concentrations required under this paragraph shall be based on applicable air quality models, data bases, and other requirements specified in 40 CFR part 51, appendix W (Guideline on Air Quality Models).
- (2) Where an air quality model specified in 40 CFR part 51, appendix W (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis. Written approval of the permitting authority must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures developed in accordance with paragraph (q) of this section.

§ 52.21(m) Air quality analysis

- (1) Preapplication analysis.
- (i) Any application for a permit under this section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:
 - (\underline{a}) For the source, each pollutant that

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- it would have the potential to omit in a significant amount;
- (\underline{b}) For the modification, each pollutant for which it would result in a significant net emissions increase.
- (ii) With respect to any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Administrator determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.
- (iii) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.
- (iv) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.
- (v) For any application which becomes complete, except as to the requirements of paragraphs (m)(1) (iii) and (iv) of this section, between June 8, 1981, and February 9, 1982, the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least the period from February 9, 1981, to the date the application becomes otherwise complete, except that:
- (\underline{a}) If the source or modification would have been major for that pollutant under 40 CFR 52.21 as in effect on June 19, 1978, any monitoring data shall have been gathered over at least the period required by those regulations.
- (\underline{b}) If the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that paragraph $(\mathfrak{m})(1)(\mathrm{iii})$ of this section, requires shall have been gathered over at least that shorter period.

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- it would have the potential to emit in a significant amount;
- (\underline{b}) For the modification, for each pollutant for which the modification is major.
- (ii) With respect to any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the permitting authority determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.
- (iii) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.
- (iv) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the permitting authority determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.
- (v) For any application which becomes complete, except as to the requirements of paragraphs (m)(1) (iii) and (iv) of this section, between June 8, 1981, and February 9, 1982, the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least the period from February 9, 1981, to the date the application becomes otherwise complete, except that:
- (\underline{a}) If the source or modification would have been major for that pollutant under 40 CFR 52.21 as in effect on June 19, 1978, any monitoring data shall have been gathered over at least the period required by those regulations.
- (\underline{b}) If the permitting authority determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least that shorter

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- (\underline{c}) If the monitoring data would relate exclusively to ozone and would not have been required under 40 CFR 52.21 as in effect on June 19, 1978, the Administrator may waive the otherwise applicable requirements of this paragraph (v) to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.
- (vi) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR part 51 Appendix S, section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under paragraph (m)(1) of this section.
- (vii) For any application that becomes complete, except as to the requirements of paragraphs (m)(1) (iii) and (iv) pertaining to PM_{10} , after December 1, 1988 and no later than August 1, 1989 the data that paragraph (m)(1)(iii) requires shall have been gathered over at least the period from August 1, 1988 to the date the application becomes otherwise complete, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.
- (viii) With respect to any requirements for air quality monitoring of PM_{10} under paragraphs (i)(11) (i) and (ii) of this section the owner or operator of the source or modification shall use a monitoring method approved by the Administrator and shall estimate the ambient concentrations of PM_{10} using the data collected by such approved monitoring method in accordance with estimating procedures approved by the Administrator.
- (2) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Administrator determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.
- (3) Operations of monitoring stations. The owner or operator of a major stationary source or major modification

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period.

- (\underline{c}) If the monitoring data would relate exclusively to ozone and would not have been required under 40 CFR 52.21 as in effect on June 19, 1978, the permitting authority may waive the otherwise applicable requirements of this paragraph (v) to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.
- (vi) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR part 51 Appendix S, section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under paragraph (m)(1) of this section.
- (vii) For any application that becomes complete, except as to the requirements of paragraphs (m)(1) (iii) and (iv) pertaining to PM_{10} , after December 1, 1988 and no later than August 1, 1989 the data that paragraph (m)(1)(iii) requires shall have been gathered over at least the period from August 1, 1988 to the date the application becomes otherwise complete, except that if the permitting authority determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.
- (viii) With respect to any requirements for air quality monitoring of PM_{10} under paragraphs (i)(11) (i) and (ii) of this section the owner or operator of the source or modification shall use a monitoring method approved by the permitting authority and shall estimate the ambient concentrations of PM_{10} using the data collected by such approved monitoring method in accordance with estimating procedures approved by the permitting authority.
- (2) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the permitting authority determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.
- (3) Operations of monitoring stations. The owner or operator of a major

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shall meet the requirements of Appendix B to part 58 of this chapter during the operation of monitoring stations for purposes of satisfying paragraph (m) of this section.

- (n) <u>Source information</u>. The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.
- (1) With respect to a source or
 modification to which paragraphs (j),
 (1), (n) and (p) of this section apply,
 such information shall include:
- (i) A description of the nature,location, design capacity, and typicaloperating schedule of the source ormodification, including specificationsand drawings showing its design and plantlayout;
- (ii) A detailed schedule for construction of the source or modification;
- (iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to determine that best available control technology would be applied.
- (2) Upon request of the Administrator, the owner or operator shall also provide information on:
- (i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and
- (ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.
 - (o) Additional impact analyses.
- (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need

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stationary source or major modification shall meet the requirements of 40 C.F.R. part 58, Appendix B during the operation of monitoring stations for purposes of satisfying paragraph (m) of this section.

- § 52.21(n) <u>Source information</u>. The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.
- (1) With respect to a source or
 modification to which paragraphs (j),
 (1), and (p) of this section apply, or to
 a source subject to a PAL to which
 paragraphs (l) and (p) of this section
 apply, such information shall include:
- (i) A description of the nature,location, design capacity, and typicaloperating schedule of the source ormodification, including specificationsand drawings showing its design and plantlayout;
- (ii) A detailed schedule for construction of the source or modification;
- (iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to determine that best available control technology would be applied.
- (2) Upon request of the permitting authority, the owner or operator shall also provide information on:
- (i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and
- (ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

§ 52.21(o) Additional impact analyses.

(1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need

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not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

- (2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.
- (3) <u>Visibility monitoring</u>. The Administrator may require monitoring of visibility in any Federal class I area near the proposed new stationary source for major modification for such purposes and by such means as the Administrator deems necessary and appropriate.

(p) Sources impacting Federal Class I areas--additional requirements-

- (1) Notice to Federal land managers. The Administrator shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal land manager and the Federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Federal Class I area. The Administrator shall also provide the Federal land manager and such Federal officials with a copy of the preliminary determination required under paragraph (q) of this section, and shall make available to them any materials used in making that determination, promptly after the Administrator makes such determination. Finally, the Administrator shall also notify all affected Federal land managers within 30 days of receipt of any advance notification of any such permit application.
- (2) Federal Land Manager. The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to

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not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

- (2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.
- (3) <u>Visibility monitoring</u>. The permitting authority may require monitoring of visibility in any Federal class I area near the proposed new stationary source for major modification for such purposes and by such means as the permitting authority deems necessary and appropriate.

§ 52.21(p) <u>Sources impacting Federal</u> Class I areas--additional requirements

- (1) Notice to Federal land managers. The permitting authority shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal land manager and the Federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Federal Class I area. The permitting authority shall also provide the Federal land manager and such Federal officials with a copy of the preliminary determination required under paragraph (q) of this section, and shall make available to them any materials used in making that determination, promptly after the permitting authority makes such determination. Finally, the permitting authority shall also notify all affected Federal land managers within 30 days of receipt of any advance notification of any such permit application.
- (2) Federal Land Manager. The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the

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consider, in consultation with the Administrator, whether a proposed source or modification will have an adverse impact on such values.

- (3) <u>Visibility analysis</u>. The Administrator shall consider any analysis performed by the Federal land manager, provided within 30 days of the notification required by paragraph (p)(1) of this section, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any Federal Class I area. Where the Administrator finds that such an analysis does not demonstrate to the satisfaction of the Administrator that an adverse impact on visibility will result in the Federal Class I area, the Administrator must, in the notice of public hearing on the permit application, either explain his decision or give notice as to where the explanation can be obtained.
- (4) Denial--impact on air quality related values. The Federal Land Manager of any such lands may demonstrate to the Administrator that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Administrator concurs with such demonstration, then he shall not issue the permit.
- (5) Class I variances. The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal land manager concurs with such demonstration and he so certifies, the State may authorize the Administrator: <u>Provided</u>, That the applicable requirements of this section are otherwise met, to issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides would not exceed the following maximum allowable increases

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permitting authority, whether a proposed source or modification will have an adverse impact on such values.

- (3) Visibility analysis. The permitting authority shall consider any analysis performed by the Federal land manager, provided within 30 days of the notification required by paragraph (p)(1) of this section, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any Federal Class I area. Where the permitting authority finds that such an analysis does not demonstrate to the satisfaction of the permitting authority that an adverse impact on visibility will result in the Federal Class I area, the permitting authority must, in the notice of public hearing on the permit application, either explain his decision or give notice as to where the explanation can be obtained.
- (4) Denial--impact on air quality related values. The Federal Land Manager of any such lands may demonstrate to the permitting authority that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the permitting authority concurs with such demonstration, then he shall not issue the permit.
- (5) <u>Class I variances</u>. The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal land manager concurs with such demonstration and he so certifies, the permitting authority may issue the permit: Provided, That the applicable requirements of this section are otherwise met, to issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration

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over minor source baseline concentration for such pollutants:

Pollutant	Maximum allowable increase (micrograms per cubic meter)	
Particulate matter:		
PM-10, annual arithmetic mean	17	
PM-10, 24-hr maximum .	30	
Sulfur dioxide:		
Annual arithmetic mean	20	
24-hr maximum	91	
3-hr maximum	325	
Nitrogen dioxide:		
Annual arithmetic mean	25	

(6) Sulfur dioxide variance by Governor with Federal Land Manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Administrator shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: Provided, That the applicable requirements of this section are otherwise met.

(7) <u>Variance by the Governor with the President's concurrence</u>. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager

for such pollutants:

Pollutant	Maximum allowable increase (micrograms per cubic meter)	
Particulate matter:		
PM-10, annual arithmetic mean	17	
PM-10, 24-hr maximum .	30	
Sulfur dioxide:		
Annual arithmetic mean	20	
24-hr maximum	91	
3-hr maximum	325	
Nitrogen dioxide:		
Annual arithmetic mean	25	

(6) Sulfur dioxide variance by Governor with Federal Land Manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor of this State that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the permitting authority shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: Provided, That the applicable requirements of this section are otherwise met.

(7) <u>Variance by the Governor with the President's concurrence</u>. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager

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shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the pursuant to the requirements of paragraph

Administrator shall issue a permit (q)(7) of this section: Provided, That the applicable requirements of this section are otherwise met.

(8) Emission limitations for Presidential or gubernatorial variance. In the case of a permit issued pursuant to paragraph (q) (5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

> Maximum Allowable Increase [Micrograms per cubic meter]

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(q) Public participation. The Administrator shall follow the applicable procedures of 40 CFR part 124 in processing applications under this section. The Administrator shall follow the procedures at 40 CFR 52.21(r) as in effect on June 19, 1979, to the extent that the procedures of 40 CFR part 124 do not apply.

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shall be transmitted to the President. If the variance is approved by the President, the permitting authority shall issue a permit pursuant to the requirements of paragraph (q)(7) of this section: Provided, That the applicable requirements of this section are otherwise met.

(8) Emission limitations for Presidential or gubernatorial variance. In the case of a permit issued pursuant to paragraph (q) (5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

> Maximum Allowable Increase [Micrograms per cubic meter]

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

§ 52.21(q) Public participation. [Insert a reference here to the public participation procedures for PSD permits for this jurisdiction.]

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- (r) Source obligation.
- (1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.
- (2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.
- (3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State implementation plan and any other requirements under local, State, or Federal law.
- (4) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements or paragraphs (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - (5) [Reserved]

- § 52.21(r) <u>Source obligation</u>. In addition to all other applicable requirements specified in this section, the owner or operator shall comply with the requirements of paragraphs 52.21(r)(1) through (r)(9).
- (1) Any owner or operator who constructs or operates a source, modification, or project not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.
- (2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.
- (3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State implementation plan and any other requirements under local, State, or Federal law.
- (4) At such time that a particular source, modification, or project becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements or paragraphs (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - (5) [Reserved]
 - (6) Monitoring, Recordkeeping, and Reporting. [Three options are presented

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- (6) The provisions of this paragraph (r)(6) apply to projects at an existing emissions unit at a major stationary source (other than projects at a Clean Unit or at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in paragraphs $(b)(41)(ii)(\underline{a})$ through (\underline{c}) of this section for calculating projected actual emissions.
- (i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
 - (a) A description of the project;
- (\underline{b}) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
- (\underline{c}) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph $(b)(41)(ii)(\underline{c})$ of this section and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- (ii) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (r)(6)(i) of this section to the Administrator. Nothing in this paragraph (r)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any determination from the Administrator before beginning actual construction.

below. If the permitting authority wants to use the actual-to-potential test for all sources, then use Option (r)(6)-A. If the permitting authority wants to use the actual-to-projected-actual test, and include netting, then use Option (r)(6)-B. If the permitting authority wants to use the actual-to-projected actual test and not allow netting, then use Option (r)(6)-C. If the definition of "net emissions increase" has not been included in the rule, and the actual-to-potential test is being used for all sources, mark this paragraph "reserved."]

- (6) Option (r)(6)-A (actual-to-potential
 only):
- (6) Monitoring, recordkeeping and reporting. The provisions of this paragraph (r)(6) apply to any project that, although it would result in a significant emissions increase, is not a major modification because it would not result in a significant net emissions increase.
- (i) Before beginning actual construction of such a project, the owner or operator shall document and maintain a record of the following information:
 - (\underline{a}) A description of the project;
- (\underline{b}) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project;
- (\underline{c}) The applicability analysis used to determine the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the potential emissions after the project, and the netting analysis.
- (ii) No less than 30 days before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (r)(6)(i) of this section to the permitting authority.
- (6) Option (r)(6)-B (actual-to-projectedactual and netting):
- (6) Monitoring, recordkeeping and reporting.(i) The provisions of paragraph (r)(6)(i) apply to any project for which the emissions increase is

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- (iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph $(r)(6)(i)(\underline{b})$ of this section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit that regulated NSR pollutant at such emissions unit.
- (iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Administrator within 60 days after the end of each year during which records must be generated under paragraph (r)(6)(iii) of this section setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- (v) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Administrator if the annual emissions, in tons per year, from the project identified in paragraph (r)(6)(i) of this section, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section), by a significant amount (as defined in paragraph (b)(23) of this section) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph $(r)(6)(i)(\underline{c})$ of this section. Such report shall be submitted to the Administrator within 60 days after the end of such year. The report shall contain the following:
- (\underline{a}) The name, address and telephone number of the major stationary source;
- (\underline{b}) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and
- (\underline{c}) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

- determined only by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions; and that, although it would result in a significant emissions increase, is not a major modification because it would not result in a significant net emissions increase.
- (\underline{a}) Before beginning actual construction, the owner or operator shall document and maintain a record of the following information:
 - (1) A description of the project;
- $(\underline{2})$ Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project;
- $(\underline{3})$ The applicability analysis used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the potential emissions after the project, and the netting analysis.
- (\underline{b}) No less than 30 days before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph $(r)(6)(i)(\underline{a})$ of this section to the permitting authority.
- (ii) The provisions of paragraph (r)(6)(iii) apply to any project that is not subject to (r)(6)(i) of this section, and:
- (\underline{a}) that is not a major modification, and
- (\underline{b}) where emissions increases are determined, at least in part, by taking the difference between the projected actual emissions, following completion of the project, and the baseline actual emissions, and either
- (\underline{c}) the project would be a major modification if the emissions increase were determined solely through the use of potential to emit in lieu of the projected actual emissions, and/or
- (\underline{d}) the project would result in a significant emissions increase but not a significant net emissions increase.
- $(iii)(\underline{a})$ Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
 - (1) A description of the project;
- $(\underline{2})$ Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
 - (3) The applicability determination

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- used to show that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions for each affected emissions unit, the project emissions increase, and the net emissions increase, if applicable.
- (\underline{b}) No fewer than 30 days before beginning actual construction, the owner or operator shall submit a report of the information required in paragraph $(r)(6)(iii)(\underline{a})$ of this section to the permitting authority.
- (c) For 10 years after the project is completed, the owner or operator shall determine and record the calendar year emissions of any pollutant for which a significant emissions increase or a major modification would occur based on use of potential to emit in lieu of the projected actual emissions. Calendar year emissions shall be determined and recorded for any emissions unit whose emissions could be affected by the project. In addition, the owner or operator shall calculate and record the difference between the calendar year emissions and the baseline actual emissions for each such emissions unit. The owner or operator shall sum each of these calculations and compare the total to the projected emissions increase from the project. If any netting analysis was performed and reported under paragraph (r)(6) of this section, then the owner or operator shall recalculate the net emissions increase based on the calendar year emissions.
- (\underline{d}) No more than 30 days after the submittal of the facility's annual emissions inventory statement, the owner or operator shall submit a report of the information required under paragraph (r)(6)(iii)(c) of this section to the permitting authority.
- (\underline{e}) Records generated under paragraphs $(r)(6)(iii)(\underline{a})$ and (\underline{c}) shall be retained until the date 20 years after the project is completed.
- (\underline{f}) [This paragraph should be included if the demand growth exclusion provision has been included in the rule]:
- (\underline{f}) In addition to the recordkeeping and reporting requirements in paragraph $(r)(6)(iii)(\underline{a}) (\underline{e})$ of this section, if the owner or operator excluded emissions from its estimate of projected actual emissions, the owner or operator shall comply with the following:
- $(\underline{1})$ With respect to the applicability determination documented pursuant to paragraph $(r)(6)(iii)(\underline{a})(3),$ document and maintain a record of any emissions excluded from the projected actual emissions and the justification for the

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exclusion based on evidence that the owner or operator places in the public domain;

- ($\underline{2}$) With respect to the report submitted pursuant to (r)(6)(iii)(\underline{b}), include the information set forth in (r)(6)(iii)(\underline{f})($\underline{1}$) above;
- $(\underline{3})$ With respect to the calendar year emissions determined pursuant to $(r)(6)(iii)(\underline{c})$, document and maintain a record of any emissions that the owner or operator seeks to exclude and the justification for the exclusion based on evidence that the owner or operator places in the public domain; and
- $(\underline{4})$ With respect to the report submitted pursuant to $(r)(6)(iii)(\underline{d})$, include the information set forth in (r)(6)(iii)(f)(3) above.
- $(\underline{5})$ Records generated under this paragraph $(r)(6)(iii)(\underline{f})$ shall be retained until the date 20 years after the project is completed.
- (6) Option (r)(6)-C (actual-to-projectedactual and no netting):
- (6)(i) The provisions of paragraph
 (r)(6)(ii) apply to any project:
 - (a) that is not a major modification,
- (\underline{b}) where emissions increases are determined, at least in part, by taking the difference between the projected actual emissions following completion of the project, and the baseline actual emissions, and
- (\underline{c}) the project would be a major modification if emissions increase were determined solely through the use of potential to emit in lieu of the projected actual emissions.
- (ii)(\underline{a}) Before beginning actual construction of any such project, the owner or operator shall document and maintain a record of the following information:
 - (1) A description of the project;
- $(\underline{2})$ Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
- $(\underline{3})$ The applicability determination used to show that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions for each affected emissions unit, the project emissions increase.
- (\underline{b}) No fewer than 30 days before beginning actual construction, the owner or operator shall submit a report of the

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information required in paragraph $(r)(6)(ii)(\underline{a})$ of this section to the permitting authority.

- (c) For 10 years after the project is completed, the owner or operator shall determine and record the calendar year emissions of any pollutant for which a significant emissions increase or a major modification would occur based on use of potential to emit in lieu of the projected actual emissions. Calendar year emissions shall be determined and recorded for any emissions unit whose emissions could be affected by the project. In addition, the owner or operator shall calculate and record the difference between the calendar year emissions and the baseline actual emissions for each such emissions unit. The owner or operator shall sum each of these calculations and compare the total to the projected emissions increase from the project.
- (\underline{d}) No more than 30 days after the submittal of the facility's annual emissions inventory statement, the owner or operator shall submit a report of the information required under paragraph (r)(6)(ii)(c) of this section to the permitting authority.
- (\underline{e}) Records generated under paragraphs (r)(6)(ii)(\underline{a}) and (\underline{c}) shall be retained until the date 20 years after the project is completed.
- (\underline{f}) [This paragraph should be included if the demand growth exclusion provision has been included in the rule]:
- (\underline{f}) In addition to the recordkeeping and reporting requirements in paragraph $(r)(6)(ii)(\underline{a})-(\underline{e})$ of this section, if the owner or operator excluded emissions from its estimate of projected actual emissions, the owner or operator shall comply with the following:
- $(\underline{1})$ With respect to the applicability determination documented pursuant to paragraph (r)(6)(ii)(a)(3), document and maintain a record of any emissions excluded from the projected actual emissions and the justification for the exclusion based on evidence that the owner or operator places in the public domain;
- $(\underline{2})$ With respect to the report submitted pursuant to $(r)(6)(ii)(\underline{b})$, include the information set forth in $(r)(6)(ii)(f)(\underline{1})$ above;
- $(\underline{3})$ With respect to the calendar year emissions determined pursuant to (r)(6)(ii)(c), document and maintain a record of any emissions that the owner or operator seeks to exclude and the justification for the exclusion based on evidence that the owner or operator

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places in the public domain; and

- $(\underline{4})$ With respect to the report submitted pursuant to $(r)(\underline{6})(\underline{ii})(\underline{d})$, include the information set forth in $(r)(\underline{6})(\underline{ii})(\underline{f})(\underline{3})$ above.
- $(\underline{5})$ Records generated under this paragraph (r)(6)(ii)(f) shall be retained until the date 20 years after the project is completed.
- (7) The owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (r)(6) of this section available for review upon a request for inspection by the permitting authority or the general public pursuant to the requirements contained in [include here the provision in the jurisdiction's Title V program that derives from \$70.4(b)(3)(viii)] of this chapter.
- (8) The requirements of paragraphs (j) through (r) of this section shall apply as if construction has not yet commenced at any time that a project is determined to be a major modification based on any credible evidence, including but not limited to emissions data produced after the project is completed. In any such case, the owner or operator may be subject to enforcement for failure to obtain a PSD permit prior to beginning actual construction.
- (9) If an owner or operator materially fails to comply with the provisions of paragraph (r)(6) of this section, then the calendar year emissions are presumed to equal the source's potential to emit.

(7) The owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (r)(6) of this section available for review upon a request for inspection by the Administrator or the general public pursuant to the requirements contained in \$70.4(b)(3)(viii) of this chapter.

(s) Environmental impact statements.

Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

§ 52.21(s) Environmental impact statements.

Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the permitting authority conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

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(t) Disputed permits or redesignations. If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian Governing Body of a tribe affected by the redesignation of an area by a State, disagrees with such redesignation, or if a permit is proposed to be issued for any major stationary source or major modification proposed for construction in any State which the Governor of an affected State or Indian Governing Body of an affected tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or Indian Reservation, the Governor or Indian Governing Body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by any State or Indian Governing Body involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable State implementation plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

§ 52.21(t) Reserved.

(u) <u>Delegation of authority</u>. (1) The Administrator shall have the authority to delegate his responsibility for conducting source review pursuant to this section, in accordance with paragraphs (v) (2) and (3) of this section.

- (2) Where the Administrator delegates the responsibility for conducting source review under this section to any agency other than a Regional Office of the Environmental Protection Agency, the following provisions shall apply:
- (i) Where the delegate agency is not an air pollution control agency, it shall consult with the appropriate State and local air pollution control agency prior to making any determination under this section. Similarly, where the delegate agency does not have continuing responsibility for managing land use, it

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shall consult with the appropriate State and local agency primarily responsible for managing land use prior to making any determination under this section.

- (ii) The delegate agency shall send a copy of any public comment notice required under paragraph (r) of this section to the Administrator through the appropriate Regional Office.
- (3) The Administrator's authority for reviewing a source or modification located on an Indian Reservation shall not be redelegated other than to a Regional Office of the Environmental Protection Agency, except where the State has assumed jurisdiction over such land under other laws. Where the State has assumed such jurisdiction, the Administrator may delegate his authority to the States in accordance with paragraph (v)(2) of this section.
- (4) In the case of a source or modification which proposes to construct in a class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase applicable if the area were designated a class II area, and where no standard under section 111 of the act has been promulgated for such source category, the Administrator must approve the determination of best available control technology as set forth in the permit.

(v) <u>Innovative control technology</u>.

- (1) An owner or operator of a proposed major stationary source or major modification may request the Administrator in writing no later than the close of the comment period under 40 CFR 124.10 to approve a system of innovative control technology.
- (2) The Administrator shall, with the consent of the governor(s) of the affected state(s), determine that the source or modification may employ a system of innovative control technology, if: -
- (i) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
- (ii) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under paragraph (j)(2) of this section, by a date specified by the Administrator. Such date shall not be later than 4 years from the time of

§ 52.21(v) Innovative control technology.

- (1) An owner or operator of a proposed major stationary source or major modification may request the permitting authority in writing no later than the close of the comment period under 40 CFR 124.10 to approve a system of innovative control technology.
- (2) The permitting authority shall determine that the source or modification may employ a system of innovative control technology, if: --
- (i) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
- (ii) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under paragraph (j)(2) of this section, by a date specified by the permitting authority. Such date shall not be later than 4 years from the time

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startup or 7 years from permit issuance;

- (iii) The source or modification would meet the requirements of paragraphs (j) and (k) of this section, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Administrator;
- (iv) The source or modification would
 not before the date specified by the
 Administrator:
- (\underline{a}) Cause or contribute to a violation of an applicable national ambient air quality standard; or
- (\underline{b}) Impact any area where an applicable increment is known to be violated; and
- (v) All other applicable requirements including those for public participation have been met.
- (vi) The provisions of paragraph (p) of this section (relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.
- (3) The Administrator shall withdraw any approval to employ a system of innovative control technology made under this section, if:
- (i) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or
- (ii) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
- (iii) The Administrator decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- (4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with paragraph (v)(3) of this section, the Administrator may allow the source or modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

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of startup or 7 years from permit issuance;

- (iii) The source or modification would
 meet the requirements of paragraphs (j)
 and (k) of this section, based on the
 emissions rate that the stationary source
 employing the system of innovative
 control technology would be required to
 meet on the date specified by the
 permitting authority;
- (iv) The source or modification would not before the date specified by the permitting authority:
- (\underline{a}) Cause or contribute to a violation of an applicable national ambient air quality standard; or
- (\underline{b}) Impact any area where an applicable increment is known to be violated; and
- (v) All other applicable requirements including those for public participation have been met.
- (vi) The provisions of paragraph (p) of this section (relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.
- (3) The permitting authority shall withdraw any approval to employ a system of innovative control technology made under this section, if:
- (i) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or
- (ii) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
- (iii) The permitting authority decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- (4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with paragraph (v)(3) of this section, the permitting authority may allow the source or modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

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- (w) Permit rescission.
- (1) Any permit issued under this section or a prior version of this section shall remain in effect, unless and until it expires under paragraph (s) of this section or is rescinded.
- (2) Any owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under 40 CFR 52.21 as in effect on July 30, 1987, or any earlier version of this section, may request that the Administrator rescind the permit or a particular portion of the permit.
- (3) The Administrator shall grant an application for rescission if the application shows that this section would not apply to the source or modification.
- (4) If the Administrator rescinds a permit under this paragraph, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission in a newspaper of general circulation in the affected region within 60 days of the rescission shall be considered adequate notice.

- § 52.21(w) Permit rescission.
- (1) Any permit issued under this section or a prior version of this section shall remain in effect, unless and until it expires under paragraph (r) of this section or is rescinded.
- (2) Any owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under 40 CFR 52.21 as in effect on July 30, 1987, or any earlier version of this section, may request that the permitting authority rescind the permit or a particular portion of the permit.
- (3) The permitting authority may grant an application for rescission if the application shows that this section, as it existed at the time the permit was issued, would not apply to the source or modification.
- (4) If the permitting authority rescinds a permit under this paragraph, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission in a newspaper of general circulation in the affected region within 60 days of the rescission shall be considered adequate notice.
- (x) Clean Unit Test for emissions units that are subject to BACT or LAER. An owner or operator of a major stationary source has the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (x)(1) through (9) of this section.
- § 52.21(x) Clean Unit Status Designation, Maintenance and Renewal. [If the permitting authority does not want to adopt a Clean Unit provision, then choose Option (x)-A. Otherwise, choose Option (x)-B.]

Option (x)-A: Reserved.

Option (x)-B:

- (x) <u>Clean Unit Status Designation,</u> <u>Maintenance and Renewal</u>.
- (1) [Two options are presented. If the permitting authority wants to allow sources that have gone through NSR permitting within two years prior to rule adoption to obtain Clean Unit status, then choose Option (x)(1)-A. If the permitting authority only wants to allow for the creation of Clean Unit status after adoption of the rule, then choose Option (x)(1)-B.]

(1) <u>Applicability</u>. The provisions of this paragraph (x) apply to any emissions

Option (x)(1)-A:

(1) <u>Applicability</u>. The provisions of

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unit for which a reviewing authority has issued a major NSR permit within the last unit for which the permit

- (2) General provisions for Clean Units. The provisions in paragraphs (x)(2)(i) through (iv) of this section apply to a Clean Unit.
- (i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (x)(4) of this section) and before the expiration date (as determined in accordance with paragraph (x)(5) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.
- (ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination as specified in paragraph (x)(6)(iv) of this section, the emissions unit remains a Clean Unit.
- (iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination as specified in paragraph (x)(6)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (x)(3)(iii) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit

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this paragraph (x) apply to any emissions unit for which the permitting authority has issued a major NSR permit establishing BACT or LAER on or after [insert date two years prior to rule adoption] or a permit establishing Clean Unit status on or after [insert date of rule adoption].

Option (x)(1)-B:

- (1) Applicability. The provisions of this paragraph (x) apply to any emissions unit for which the permitting authority has issued a major NSR permit establishing BACT or LAER or a permit establishing Clean Unit status on or after [insert date of rule adoption].
- (2) General provisions for Clean Units. The provisions in paragraphs (x)(2)(i) through (iii) of this section apply to a Clean Unit.
- (i) For a major modification that would affect a Clean Unit without causing the emissions unit to lose its Clean Unit designation, the BACT determination that was relied upon for the Clean Unit designation shall serve to meet the BACT requirement of paragraph (j) of this section with respect to the Clean Unit.
- (ii) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (x)(4) of this section) and before the expiration date (as determined in accordance with paragraph (x)(5) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.
- (iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT or LAER or the project would alter any physical or operational characteristics that formed the basis for the BACT or LAER determination as specified in paragraph (x)(6)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit requalifies as a Clean Unit pursuant to paragraph (x)(3)(iii) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends

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designation ends immediately prior to the time when actual construction begins.

- (iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs $(a)(2)(iv)(\underline{a})$ through (\underline{d}) and paragraph $(a)(2)(iv)(\underline{f})$ of this section as if the emissions unit is not a Clean Unit.
- (3) Qualifying or re-qualifying to use the Clean Unit Applicability Test. An emissions unit automatically qualifies as a Clean Unit when the unit meets the criteria in paragraphs (x)(3)(i) and (ii)of this section. After the original Clean Unit expires in accordance with paragraph (x)(5) of this section or is lost pursuant to paragraph (x)(2)(iii) of this section, such emissions unit may requalify as a Clean Unit under either paragraph (x)(3)(iii) of this section, or under the Clean Unit provisions in paragraph (y) of this section. To requalify as a Clean Unit under paragraph (x)(3)(iii) of this section, the emissions unit must obtain a new major NSR permit issued through the applicable PSD program and meet all the criteria in paragraph (x)(3)(iii) of this section. The Clean Unit designation applies individually for each pollutant emitted by the emissions unit.

immediately prior to the time when actual construction begins. $\,$

(3) Qualifying or re-qualifying as a Clean Unit. An emissions unit initially qualifies as a Clean Unit when the unit meets the criteria in paragraphs (x)(3)(i) and (ii) of this section. After the original Clean Unit expires in accordance with paragraph (x)(5) of this section or is lost pursuant to paragraph (x)(2)(iii) of this section, such emissions unit may requalify as a Clean Unit under paragraph (x)(3)(iii) of this section. The Clean Unit designation applies individually for each pollutant emitted by the emissions unit.

(i) Permitting requirement. [Two options
are presented here. Under Option
(x)(3)(i)-A, a source can only obtain
Clean Unit status by obtaining a major
NSR permit. Under Option (x)(3)(i)-B, a
source can also obtain such status by
obtaining a permit specifically to
establish Clean Unit status, such as a
Title V permit.]

Option (x)(3)(i)-A: [Two suboptions are presented here. If the permitting authority wants to allow sources that have gone through NSR permitting within two years prior to rule adoption to obtain Clean Unit status, then choose Suboption (x)(3)(i)-A-1. If the permitting authority only wants to allow for the creation of Clean Unit status after adoption (x)(3)(i)-A-2:]

(i) <u>Permitting requirement</u>. The emissions unit must have received a major NSR permit within the last 10 years. The

NSR permit within the last 10 years. The owner or operator must maintain and be able to provide information that would

Suboption (x)(3)(i)-A-1:

(i) Permitting requirement. On or after [insert date two years prior to the date of rule adoption], the emissions unit must have received a major NSR permit establishing BACT or LAER for the unit.

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demonstrate that this permitting requirement is met.

If the major NSR permit was issued prior to [insert date of rule adoption], then the owner or operator must submit an application for an administrative amendment to its major NSR permit (or its Title V permit) indicating the emissions unit(s) that qualify for Clean Unit status. If the application is approved, the permitting authority shall specify the emission limits and work practice requirements adopted in conjunction with BACT or LAER and any physical or operational characteristics which formed the basis of the BACT or LAER determination that must be met to maintain the Clean Unit designation.

Suboption (x)(3)(i)-A-2:

(i) <u>Permitting requirement.</u> On or after [insert date of rule adoption], the emissions unit must have received a major NSR permit establishing BACT or LAER for the unit.

Option (x)(3)(i)-B: [Two suboptions are presented here. If the permitting authority wants to allow sources that have gone through NSR permitting within two years prior to rule adoption to obtain Clean Unit status, then choose Suboption (x)(3)(i)-B-1. If the permitting authority only wants to allow for the creation of Clean Unit status after adoption (x)(3)(i)-B-2.]

Suboption (x)(3)(i)-B-1:

(i) Permitting requirement.

(a) On or after [insert date two years prior to the date of rule adoption], the emissions unit must have received a major NSR permit establishing BACT or LAER for the unit. If the major NSR permit was issued prior to [insert date of rule adoption], then the owner or operator must submit an application for an administrative amendment to its major NSR permit (or its Title V permit) indicating the emissions unit(s) that qualify for Clean Unit status. If the application is approved, the permitting authority shall specify the emission limits and work practice requirements adopted in conjunction with BACT or LAER and any physical or operational characteristics which formed the basis of the BACT or LAER determination that must be met to maintain the Clean Unit designation. a major NSR permit establishing BACT or LAER, or

 (\underline{b}) On or after [insert date of rule adoption], the emission unit must have received a permit issued by the

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permitting authority to establish Clean Unit status. Any such permit shall follow all permitting procedures required for major modifications, including public participation procedures and BACT or LAER analysis procedure as would be required under this rule. The permit shall establish the emission limitations or work practice requirements that constitute BACT or LAER for the emissions unit at the time of permit issuance, and shall designate the emissions unit as a Clean Unit based on that determination. The Title V permit may be used to establish Clean Unit status.

Suboption (x)(3)(i)-B-2:

- (i) <u>Permitting requirement.</u> On or after [insert date of rule adoption], the emission unit must have received either:
- (\underline{a}) a major NSR permit establishing BACT or LAER, or
- (b) a permit issued by the permitting authority to establish Clean Unit status. Any such permit shall follow all permitting procedures required for major modifications, including public participation procedures and BACT or LAER analysis procedure as would be required under this rule. The permit shall establish the emission limitations or work practice requirements that constitute BACT or LAER for the emissions unit at the time of permit issuance, and shall designate the emissions unit as a Clean Unit based on that determination. The Title V permit may be used to establish Clean Unit status.
- (ii) Qualifying air pollution control technologies. Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes pollution prevention as defined under paragraph (b)(39) of this section or work practices) that meets both the following requirements in paragraphs $(x)(3)(ii)(\underline{a})$ and (\underline{b}) of this section.
- (\underline{a}) The control technology achieves the BACT or LAER level of emissions reductions as determined through issuance of a permit as specified in paragraph (x)(3)(i). However, the emissions unit is not eligible for the Clean Unit designation if the BACT or LAER determination resulted in no requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type.
- (ii) <u>Qualifying air pollution control technologies</u>. Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes pollution prevention as defined under paragraph (b)(39) of this section or work practices) that meets both the following requirements in paragraphs $(x)(3)(ii)(\underline{a})$ and (\underline{b}) of this section.
- (\underline{a}) The control technology achieves the BACT or LAER level of emissions reductions as determined through issuance of a major NSR permit within the past 10 years. However, the emissions unit is not eligible for the Clean Unit designation if the BACT determination resulted in no requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type.
 - (\underline{b}) The owner or operator made an

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investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or expenses to apply a pollution prevention technique to an emissions unit.

(iii) Re-qualifying for the Clean Unit designation. The emissions unit must obtain a new major NSR permit that requires compliance with the current-day BACT (or LAER), and the emissions unit must meet the requirements in paragraphs (x)(3)(i) and (x)(3)(ii) of this section.

- (4) <u>Effective date of the Clean Unit</u> <u>designation</u>. The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project at the emissions unit is a major modification) is determined according to the applicable paragraph (x)(4)(i) or (x)(4)(ii) of this section.
- (i) Original Clean Unit designation, and emissions units that re-qualify as Clean Units by implementing new control technology to meet current-day BACT. The effective date is the date the emissions unit's air pollution control technology is placed into service, or 3 years after the issuance date of the major NSR permit, whichever is earlier, but no sooner than March 3, 2003, that is the date these provisions become effective.
- (ii) Emissions units that re-qualify for the Clean Unit designation using an existing control technology. The effective date is the date the new, major NSR permit is issued.
- (5) Clean Unit expiration. An emissions unit's Clean Unit designation expires (that is, the date on which the owner or operator may no longer use the Clean Unit Test to determine whether a project affecting the emissions unit is, or is part of, a major modification) according to the applicable paragraph (x)(5)(i) or (ii) of this section.

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- (\underline{b}) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or expenses to apply a pollution prevention technique to an emissions unit.
- (iii) Re-qualifying for the Clean Unit designation. The permitting authority may allow an emissions unit to requalify as a Clean Unit. To obtain requalification status, the owner or operator of the unit must demonstrate to the satisfaction of the permitting authority that the unit meets BACT at the time of application for renewal. Such demonstration shall be submitted as part of the source's Title V permit renewal application and shall be acted on by the permitting authority as part of its final action on the Title V permit. The permitting authority may require an air quality impact analysis if appropriate, for example, if stack parameters have changed.
- (4) Effective date of the Clean Unit designation. The effective date of an emissions unit's Clean Unit designation is the date the owner or operator obtains authorization pursuant to paragraph (x)(3) to treat such unit as a Clean Unit.

(5) <u>Clean Unit expiration</u>. An emissions unit's Clean Unit designation expires 5 years after the effective date or at an earlier time specified by the permitting authority at the time of clean unit designation or at any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (x)(7) of this

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- (i) Original Clean Unit designation, and emissions units that re-qualify by implementing new control technology to meet current-day BACT. For any emissions unit that automatically qualifies as a Clean Unit under paragraphs (x)(3)(i) and (ii) of this section or re-qualifies by implementing new control technology to meet current-day BACT under paragraph (x)(3)(iii) of this section, the Clean Unit designation expires 10 years after the effective date, or the date the equipment went into service, whichever is earlier; or, it expires at any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (x)(7) of this section.
- (ii) Emissions units that re-qualify for the Clean Unit designation using an existing control technology. For any emissions unit that re-qualifies as a Clean Unit under paragraph (x)(3)(iii) of this section using an existing control technology, the Clean Unit designation expires 10 years after the effective date; or, it expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (x)(7) of this section.
- (6) Required title V permit content for a Clean Unit. After the effective date of the Clean Unit designation, and in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed, the title V permit for the major stationary source must include the following terms and conditions in paragraphs (x)(6)(i) through (vi) of this section related to the Clean Unit.
- (i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which this designation applies.
- (ii) The effective date of the Clean Unit designation. If this date is not known when the Clean Unit designation is initially recorded in the title V permit (e.g., because the air pollution control technology is not yet in service), the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is determined, the owner or operator must notify the Administrator of the exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a

- 6) Required title V permit content for a Clean Unit. After the effective date of the Clean Unit designation, and in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed, the title V permit for the major stationary source must include the following terms and conditions in paragraphs (x)(6)(i) through (vi) of this section related to the Clean Unit.
- (i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which this designation applies.
- (ii) The effective date of the Clean Unit designation.

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modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

- (iii) The expiration date of the Clean <u>Unit designation</u>. If this date is not known when the Clean Unit designation is initially recorded into the title V permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is determined, the owner or operator must notify the Administrator of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.
- (iv) All emission limitations and work practice requirements adopted in conjunction with BACT, and any physical or operational characteristics which formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).
- (v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining the Clean Unit designation. (See paragraph (x)(7) of this section.)
- (vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (x)(7) of this section.
- (7) <u>Maintaining the Clean Unit</u> <u>designation</u>. To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (x)(7)(i) through (iii) of this section. This paragraph (x)(7) applies independently to each pollutant for which the emissions unit has the Clean Unit designation. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.
- (i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted in conjunction with the BACT that is recorded in the major NSR permit, and subsequently reflected in the title V permit. The owner or operator may not

 $\mbox{(iii)}\mbox{\ }$ The expiration date of the Clean Unit designation.

- (iv) All emission limitations and work practice requirements adopted in conjunction with BACT, and any physical or operational characteristics which formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).
- (v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining the Clean Unit designation.
- (7) <u>Maintaining the Clean Unit</u> <u>designation</u>. To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (x)(7)(i) through (iii) of this section. This paragraph (x)(7) applies independently to each pollutant for which the emissions unit has the Clean Unit designation. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.
- (i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted in conjunction with BACT or LAER that is recorded in the major NSR permit, and subsequently reflected in the title V permit. The Clean Unit must be operated

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make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).

- (ii) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.
- (iii) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.
- (8) Netting at Clean Units. Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis"), unless such use occurs before the effective date of the Clean Unit designation, or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emissions limit if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(9) Effect of redesignation on the Clean Unit designation. The Clean Unit designation of an emissions unit is not affected by re-designation of the

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within the physical and operational parameters on which the Clean Unit designation was based, as specified in the major NSR permit or permit designating the unit as a Clean Unit or in the Clean Unit designation letter issued by the permitting authority pursuant to (x)(3), and subsequently reflected in the title V permit.

- (ii) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.
- (iii) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.
- (8) Reserved. [This paragraph is addressed in the definition of net emissions increase.]

(9) Redesignation. [Three options are presented here. If the permitting authority wants to immediately revoke Clean Unit status upon redesignation, then choose Option (x)(9)-A. If the permitting authority wants to simply bar renewal (if renewal is to be permitted) after redesignation, then choose Option (x)(9)-B. If the permitting authority wants to allow some opportunity to retain Clean Unit status, then choose Option (x)(9)-C.

Option (x)(9)-A:

(9) <u>Effect of redesignation on the Clean Unit designation</u>. If a unit for which the Clean Unit designation is based on

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attainment status of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if an existing Clean Unit designation expires, it must re-qualify under the requirements that are currently applicable in the area.

BACT is located in an area that is redesignated to nonattainment, its Clean Unit designation is automatically revoked upon such nonattainment designation.

Option (x)(9)-B:

(9) Effect of redesignation on the Clean Unit designation. If a unit for which the Clean Unit designation is based on BACT is located in an area that is redesignated to nonattainment, its Clean Unit designation is not affected. However, the unit shall not requalify for Clean Unit status upon expiration unless a showing is made that the unit will meet LAER.

Option (x)(9)-C:

(9) Effect of redesignation on the Clean Unit designation. If a Clean Unit is located in an area that is redesignated to nonattainment, then within six months after such nonattainment designation, the Clean Unit status expires unless the owner or operator demonstrates to the satisfaction of the permitting authority that the Clean Unit meets a LAER level of control. Thereafter, the unit may not be requalified as a Clean Unit unless the unit is determined to meet LAER through the permitting procedures specified in paragraph (x)(3)(ii)(b) of this section.

- (y) Clean Unit provisions for emissions units that achieve an emission limitation comparable to BACT. An owner or operator of a major stationary source has the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (y)(1) through (11) of this section.
- (1) Applicability. The provisions of this paragraph (y) apply to emissions units which do not qualify as Clean Units under paragraph (x) of this section, but which are achieving a level of emissions control comparable to BACT, as determined by the Administrator in accordance with this paragraph (y).
- (2) <u>General provisions for Clean Units</u>. The provisions in paragraphs (y)(2)(i) through (iv) of this section apply to a Clean Unit (designated under this paragraph (y)).
- (i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (y)(5) of this section)

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and before the expiration date (as determined in accordance with paragraph (y)(6) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

- (ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (y)(4) of this section) to be comparable to BACT, and the project would not alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT as specified in paragraph (y)(8)(iv) of this section, the emissions unit remains a Clean Unit.
- (iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (y)(4) of this section) to be comparable to BACT, or the project would alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT as specified in paragraph (y)(8)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (x)(3)(iii) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.
- (iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs (a)(2)(iv)(\underline{a}) through (\underline{d}) and paragraph (a)(2)(iv)(\underline{f}) of this section as if the emissions unit is not a Clean Unit.
- (3) Qualifying or re-qualifying to use the Clean Unit applicability test. An emissions unit qualifies as a Clean Unit when the unit meets the criteria in paragraphs (y)(3)(i) through (iii) of this section. After the original Clean Unit designation expires in accordance with paragraph (y)(6) of this section or is lost pursuant to paragraph (y)(2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (y)(3)(iv) of this section, or

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under the Clean Unit provisions in paragraph (x) of this section. To requalify as a Clean Unit under paragraph (y)(3)(iv) of this section, the emissions unit must obtain a new permit issued pursuant to the requirements in paragraphs (y)(7) and (8) of this section and meet all the criteria in paragraph (y)(3)(iv) of this section. The Administrator will make a separate Clean Unit designation for each pollutant emitted by the emissions unit for which the emissions unit qualifies as a Clean Unit.

- (i) Qualifying air pollution control technologies. Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes pollution prevention as defined under paragraph (b)(39) of this section or work practices) that meets both the following requirements in paragraphs $(y)(3)(i)(\underline{a})$ and (\underline{b}) of this section.
- (\underline{a}) The owner or operator has demonstrated that the emissions unit's control technology is comparable to BACT according to the requirements of paragraph (y)(4) of this section. However, the emissions unit is not eligible for a Clean Unit designation if its emissions are not reduced below the level of a standard, uncontrolled emissions unit of the same type (e.g., if the BACT determinations to which it is compared have resulted in a determination that no control measures are required).
- (\underline{b}) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or to retool the unit to apply a pollution prevention technique.
- (ii) Impact of emissions from the unit. The Administrator must determine that the allowable emissions from the emissions unit will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.
- (iii) <u>Date of installation</u>. An emissions unit may qualify as a Clean Unit even if the control technology, on which the Clean Unit designation is based, was installed before March 3,

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2003. However, for such emissions units, the owner or operator must apply for the Clean Unit designation before December 31, 2004. For technologies installed on and after March 3, 2003, the owner or operator must apply for the Clean Unit designation at the time the control technology is installed.

- (iv) Re-qualifying as a Clean Unit. The emissions unit must obtain a new permit (pursuant to requirements in paragraphs (y)(7) and (8) of this section) that demonstrates that the emissions unit's control technology is achieving a level of emission control comparable to current-day BACT, and the emissions unit must meet the requirements in paragraphs $(y)(3)(i)(\underline{a})$ and (y)(3)(ii) of this section.
- (4) <u>Demonstrating control effectiveness</u> comparable to <u>BACT</u>. The owner or operator may demonstrate that the emissions unit's control technology is comparable to <u>BACT</u> for purposes of paragraph (y)(3)(i) of this section according to either paragraph (y)(4)(i) or (ii) of this section. Paragraph (y)(4)(iii) of this section specifies the time for making this comparison.
- (i) Comparison to previous BACT and <u>LAER determinations</u>. The Administrator maintains an on-line data base of previous determinations of RACT, BACT, and LAER in the RACT/BACT/LAER Clearinghouse (RBLC). The emissions unit's control technology is presumed to be comparable to BACT if it achieves an emission limitation that is equal to or better than the average of the emission limitations achieved by all the sources for which a BACT or LAER determination has been made within the preceding 5 years and entered into the RBLC, and for which it is technically feasible to apply the BACT or LAER control technology to the emissions unit. The Administrator shall also compare this presumption to any additional BACT or LAER determinations of which he or she is aware, and shall consider any information on achieved-in-practice pollution control technologies provided during the public comment period, to determine whether any presumptive determination that the control technology is comparable to BACT is correct.
- (ii) The substantially-as-effective test. The owner or operator may demonstrate that the emissions unit's control technology is substantially as effective as BACT. In addition, any other person may present evidence related to whether the control technology is

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substantially as effective as BACT during the public participation process required under paragraph (y)(7) of this section. The Administrator shall consider such evidence on a case-by-case basis and determine whether the emissions unit's air pollution control technology is substantially as effective as BACT.

- (iii) <u>Time of comparison</u>.
- (a) Emissions units with control technologies that are installed before March 3, 2003. The owner or operator of an emissions unit whose control technology is installed before March 3, 2003 may, at its option, either demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, or demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day BACT requirements. The expiration date of the Clean Unit designation will depend on which option the owner or operator uses, as specified in paragraph (y)(6) of this section.
- (b) Emissions units with control technologies that are installed on and after March 3, 2003. The owner or operator must demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day BACT requirements.
- (5) Effective date of the Clean Unit designation. The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project involving the emissions unit is a major modification) is the date that the permit required by paragraph (y)(7) of this section is issued or the date that the emissions unit's air pollution control technology is placed into service, whichever is later.
- (6) Clean Unit expiration. If the owner or operator demonstrates that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, then the Clean Unit designation expires 10 years from the date that the control technology was installed. For all other emissions units, the Clean Unit designation expires 10 years from the effective date of the Clean Unit designation, as determined according to paragraph (y)(5) of this section. In addition, for all emissions

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units, the Clean Unit designation expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (y)(9) of this section.

- (7) Procedures for designating emissions units as Clean Units. The Administrator shall designate an emissions unit a Clean Unit only by issuing a permit through a permitting program that has been approved by the Administrator and that conforms with the requirements of §§51.160 through 51.164 of this chapter including requirements for public notice of the proposed Clean Unit designation and opportunity for public comment. Such permit must also meet the requirements in paragraph (y)(8) of this section.
- (8) Required permit content. The permit required by paragraph (y)(7) of this section shall include the terms and conditions set forth in paragraphs (y)(8)(i) through (vi) of this section. Such terms and conditions shall be incorporated into the major stationary source's title V permit in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed.
- (i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which this designation applies.
- (ii) The effective date of the Clean Unit designation. If this date is not known when the Administrator issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is known, then the owner or operator must notify the Administrator of the exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.
- (iii) The expiration date of the Clean Unit designation. If this date is not known when the Administrator issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the

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control technology is placed into service). Once the expiration date is known, then the owner or operator must notify the Administrator of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

- (iv) All emission limitations and work practice requirements adopted in conjunction with emission limitations necessary to assure that the control technology continues to achieve an emission limitation comparable to BACT, and any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT (e.g., possibly the emissions unit's capacity or throughput).
- (v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining its Clean Unit designation. (See paragraph (y)(9) of this section.)
- (vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (y)(9) of this section.
- (9) Maintaining a Clean Unit designation. To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (y)(9)(i) through (v) of this section. This paragraph (y)(9) applies independently to each pollutant for which the Administrator has designated the emissions unit a Clean Unit. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.
- (i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted to ensure that the control technology continues to achieve emission control comparable to BACT.
- (ii) The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for

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the determination that the control technology is achieving a level of emission control that is comparable to BACT (e.g., possibly the emissions unit's capacity or throughput).

(iii) [Reserved]

- (iv) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.
- (v) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.
- (10) Netting at Clean Units. Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis") unless such use occurs before March 3, 2003 or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the emissions unit's new emissions limit if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.
- (11) Effect of redesignation on a Clean Unit designation. The Clean Unit designation of an emissions unit is not affected by redesignation of the attainment status of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if a Clean Unit's designation expires or is lost pursuant to paragraphs (x)(2)(iii) and (y)(2)(iii) of this section, it must re-qualify under the requirements that are currently applicable.

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- (z) PCP exclusion procedural
 requirements. PCPs shall be provided
 according to the provisions in paragraphs
 (z)(1) through (6) of this section.
- (1) Before an owner or operator begins actual construction of a PCP, the owner or operator must either submit a notice to the Administrator if the project is listed in paragraphs (b)(32)(i) through (vi) of this section, or if the project is not listed in paragraphs (b)(32)(i) through (vi) of this section, then the owner or operator must submit a permit application and obtain approval to use the PCP exclusion from the Administrator consistent with the requirements in paragraph (z)(5) of this section. Regardless of whether the owner or operator submits a notice or a permit application, the project must meet the requirements in paragraph (z)(2) of this section, and the notice or permit application must contain the information required in paragraph (z)(3) of this
- (2) Any project that relies on the PCP exclusion must meet the requirements of paragraphs (z)(2)(i) and (ii) of this section.
- (i) Environmentally beneficial analysis. The environmental benefit from the emissions reductions of pollutants regulated under the Act must outweigh the environmental detriment of emissions increases in pollutants regulated under the Act. A statement that a technology from paragraphs (b)(32)(i) through (vi) of this section is being used shall be presumed to satisfy this requirement.
- (ii) Air quality analysis. The emissions increases from the project will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.
- (3) <u>Content of notice or permit</u>
 <u>application</u>. In the notice or permit
 application sent to the Administrator,
 the owner or operator must include, at a

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- § 52.21(z) Pollution Control Projects (PCPs). PCPs may be approved according to the provisions in paragraphs (z)(1) through (6) of this section.
- (1) Before an owner or operator begins actual construction of a PCP, the owner or operator must submit a permit application. The project must meet the requirements in paragraph (z)(2) of this section, and the permit application must contain the information required in paragraph (z)(3) of this section.
- (i) For projects listed in paragraphs (b)(32)(i) through (vi), once the owner or operator has submitted the application, he or she may proceed with the project at his or her own risk. If the permitting authority does not approve the application for a PCP, the project shall be considered a major modification, and the owner or operator may be subject to enforcement for failure to obtain a PSD permit prior to beginning actual construction.
- (ii) All other projects require Permitting Authority approval prior to construction consistent with the requirements in paragraph (z)(5) of this section.
- (2) Any project that relies on the PCP exclusion must meet the requirements of paragraphs (z)(2)(i) and (ii) of this section.
- (i) Environmentally beneficial analysis. The environmental benefit from the emissions reductions must outweigh the environmental detriment of emissions increases, considering the relative emissions levels of the pollutants in question, their relative increases and decreases, their predicted ambient levels, ambient air quality standards and guidelines, the toxicity of the pollutants, and any other relevant factors.
- (ii) Air quality analysis. The maximum allowable emissions from the project will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) that has been identified for a Federal Class I area by a Federal Land Manager.
- (3) <u>Content of permit application</u>. In the permit application, the owner or operator must include, at a minimum, the

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minimum, the information listed in paragraphs (z)(3)(i) through (v) of this section.

- (i) A description of the project.
- (ii) The potential emissions increases and decreases of any pollutant regulated under the Act and the projected emissions increases and decreases using the methodology in paragraph (a)(2)(iv) of this section, that will result from the project, and a copy of the environmentally beneficial analysis required by paragraph (z)(2)(i) of this section.
- (iii) A description of monitoring and recordkeeping, and all other methods, to be used on an ongoing basis to demonstrate that the project is environmentally beneficial. Methods should be sufficient to meet the requirements in part 70 and part 71 of this chapter.
- (iv) A certification that the project will be designed and operated in a manner that is consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (z)(2)(i) and (ii) of this section, with information submitted in the notice or permit application, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.
- (v) Demonstration that the PCP will not have an adverse air quality impact (e.g., modeling, screening level modeling results, or a statement that the collateral emissions increase is included within the parameters used in the most recent modeling exercise) as required by paragraph (z)(2)(ii) of this section. An air quality impact analysis is not required for any pollutant that will not

information listed in paragraphs
(z)(3)(i) through (v) of this section.

- (i) A description of the project.
- (ii) [Two options are presented here. If the permitting authority is using only the actual-to-potential test, then use Option (z)(3)(ii)-A. Otherwise, use Option (z)(3)(ii)-B.]

Option (z)(3)(ii)-A:

(ii) The potential emissions increases and decreases of any pollutant regulated under the Act that will result from the project.

Option (z)(3)(ii)-B:

- (ii) The potential emissions increases and decreases of any pollutant regulated under the Act and the projected actual emissions increases and decreases using the methodology in paragraph (a)(2)(iv) of this section that will result from the project.
- (iii) A description of monitoring and recordkeeping, and all other methods, to be used on an ongoing basis to demonstrate that the project is environmentally beneficial. Methods should be sufficient to meet the requirements [Here cite the monitoring provisions applicable in the Title V program for your jurisdiction. These provisions stem from the monitoring requirements in Part 70 found at 40 C.F.R. § 70.6(a)(3)].
- (iv) A certification that the project will be designed and operated in a manner that is consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (z)(2)(i) and (ii) of this section, with information submitted in the notice or permit application, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.
- (v) The applicant must demonstrate to the permitting authority's satisfaction that the maximum allowable emissions from the project will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or

adversely impact an air quality related value (such as visibility) that has been identified for a Federal Class I area by

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experience a significant emissions increase as a result of the project.

- a Federal Land Manager. The permitting authority may approve the use of screening air quality modeling or the use of worst case air quality modeling already on record that the agency determines adequately addresses the maximum potential emissions from the PCP. The permitting authority may require that the demonstration meet any or all of the requirements of paragraphs (k) through (p) of this section as reasonable and necessary to assure the protection of air quality. An air quality impact analysis is not required for any pollutant that will not experience a significant emissions increase, evaluated on an actual to potential basis, as a result of the project.
- (vi) The applicant must demonstrate to the permitting authority's satisfaction that the project is environmentally beneficial as provided in paragraph (z)(2)(i) of this section. A statement that a technology from paragraphs (b)(32)(i) through (vi) of this section is being used shall be presumed to satisfy this requirement, though the permitting authority has the authority to rebut such presumption and determine that the project is not environmentally beneficial and the project does not qualify as a PCP.
- (vii) Any additional information as required by the permitting authority.
 - (4) <u>Reserved</u>.
- (4) Notice process for listed projects. For projects listed in paragraphs (b)(32)(i) through (vi) of this section, the owner or operator may begin actual construction of the project immediately after notice is sent to the Administrator (unless otherwise prohibited under requirements of the applicable State Implementation Plan). The owner or operator shall respond to any requests by the Administrator for additional information that the Administrator determines is necessary to evaluate the suitability of the project for the PCP exclusion.
- (5) Permit process for unlisted projects. Before an owner or operator may begin actual construction of a PCP project that is not listed in paragraphs (b)(32)(i) through (vi) of this section, the project must be approved by the Administrator and recorded in a State Implementation Plan-approved permit or title V permit using procedures that are consistent with §§51.160 and 51.161 of this chapter. This includes the requirement that the Administrator provide the public with notice of the proposed approval, with access to the environmentally beneficial analysis and

(5) Permit process. Before an owner or operator may begin actual construction of a PCP project that is not listed in paragraphs (b)(32)(i) through (vi) of this section, the project must be approved by the permitting authority through the inclusion of a permit. The permitting authority will provide the public with notice of the proposed approval, with access to the environmentally beneficial analysis and the air quality analysis, and provide at least a 30-day period for the public to submit comments. The permitting

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the air quality analysis, and provide at least a 30-day period for the public and the Administrator to submit comments. The Administrator must address all material comments received by the end of the comment period before taking final action on the permit.

- (6) Operational requirements. Upon installation of the PCP, the owner or operator must comply with the requirements of paragraphs (z)(6)(i) through (iv) of this section.
- (i) General duty. The owner or operator must operate the PCP in a manner consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (z)(2)(i) and (ii) of this section, with information submitted in the notice or permit application required by paragraph (z)(3) of this section, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.
- (ii) Recordkeeping. The owner or operator must maintain copies on site of the environmentally beneficial analysis, the air quality impacts analysis, and monitoring and other emission records to prove that the PCP operated consistent with the general duty requirements in paragraph (z)(6)(i) of this section.
- (iii) <u>Permit requirements</u>. The owner or operator must comply with any provisions in the State Implementation Plan-approved permit or title V permit related to use and approval of the PCP exclusion.
- (iv) Generation of emission reduction credits. Emission reductions created by a PCP shall not be included in calculating a significant net emissions increase unless the emissions unit further reduces emissions after qualifying for the PCP exclusion (e.g., taking an operational restriction on the hours of operation). The owner or operator may generate a credit for the difference between the level of reduction which was used to qualify for the PCP exclusion and the new emissions limit if such reductions are surplus, quantifiable, and permanent. For

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authority must address all material comments received by the end of the comment period before taking final action on the permit.

- (6) Operational requirements. Upon installation of the PCP, the owner or operator must comply with the requirements of paragraphs (z)(6)(i) through (iv) of this section.
- (i) <u>General duty</u>. The owner or operator must operate the PCP in a manner consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (z)(2)(i) and (ii) of this section, with information submitted in the permit application required by paragraph (z)(3) of this section, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.
- (ii) <u>Recordkeeping</u>. The owner or operator must maintain copies on site of the environmentally beneficial analysis, the air quality impacts analysis, and monitoring and other emission records to demonstrate that the PCP operated consistent with the general duty requirements in paragraph (z)(6)(i) of this section.
- (iii) <u>Permit requirements</u>. The owner or operator must comply with any provisions in the permit related to use and approval of the PCP exclusion.
- (iv) [Note: if the definition of "net emissions increase" has not been included in the rule, eliminate the italicized language.] Generation of emission reduction credits. Emission reductions created by a PCP shall not be included in calculating a significant net emissions increase or generating emission offset credits. Future emissions reductions achieved at the emissions unit after qualifying for the PCP exclusion may be creditable to the extent they meet the requirements for creditable decreases in emissions.

purposes of generating offsets, the reductions must also be federally

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enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(aa) <u>Actuals PALs</u>. The provisions in paragraphs (aa)(1) through (15) of this section govern actuals PALs.

(1) Applicability.

- (i) The Administrator may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in paragraphs (aa)(1) through (15) of this section. The term "PAL" shall mean "actuals PAL" throughout paragraph (aa) of this section.
- (ii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (aa)(1) through (15) of this section, and complies with the PAL permit:
- (\underline{a}) Is not a major modification for the PAL pollutant;
- (\underline{b}) Does not have to be approved through the PSD program; and
- (\underline{c}) Is not subject to the provisions in paragraph (r)(4) of this section (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).
- (iii) Except as provided under paragraph $(aa)(1)(ii)(\underline{c})$ of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.
- (2) <u>Definitions</u>. For the purposes of this section, the definitions in paragraphs (aa)(2)(i) through (xi) of this section apply. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (b) of this section or in the Act.
- (i) <u>Actuals PAL</u> for a major stationary source means a PAL based on the baseline

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Limits (PALs). [This section governs
PALs. Three options are presented.
Option (aa)-A is an alternative for
Actuals PALs. Option (aa)-B provides a
Declining Actuals PALs. Option (aa)-C
provides a Declining Allowables PALs.]

Option (aa)-A: Actuals PALs. The provisions in paragraphs (aa)(1) through (15) of this section govern actuals PALs.

(1) Applicability.

- (i) The permitting authority may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in paragraphs (aa)(1) through (15) of this section. The term "PAL" shall mean "actuals PAL" throughout paragraph (aa) of this section.
- (ii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (aa)(1) through (15) of this section, and complies with the PAL permit:
 - (\underline{a}) Is not a major modification for the PAL pollutant; and
 - (\underline{b}) Does not have to be approved through the PSD program.
- (iii) A major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL, including the provisions of (r)(4) of this Section.
- (2) <u>Definitions</u>. For the purposes of this section, the definitions in paragraphs (aa)(2)(i) through (xi) of this section apply. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (b) of this section or in the Act.
- (i) <u>Actuals PAL</u> for a major stationary source means a PAL, determined consistent with the procedures of paragraph (aa).

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actual emissions (as defined in paragraph (b)(48) of this section) of all emissions units (as defined in paragraph (b)(7) of this section) at the source, that emit or have the potential to emit the PAL pollutant.

- (ii) <u>Allowable emissions</u> means "allowable emissions" as defined in paragraph (b)(16) of this section, except as this definition is modified according to paragraphs $(aa)(2)(ii)(\underline{a})$ and (\underline{b}) of this section.
- (\underline{a}) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.
- (\underline{b}) An emissions unit's potential to emit shall be determined using the definition in paragraph (b)(4) of this section, except that the words "or enforceable as a practical matter" should be added after "federally enforceable."
- (iii) <u>Small emissions unit</u> means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (b)(23) of this section or in the Act, whichever is lower.

(iv) Major emissions unit means:

- (\underline{a}) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or
- (\underline{b}) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.
- (v) <u>Plantwide applicability limitation</u> (<u>PAL</u>) means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with paragraphs (aa)(1) through (15) of this section.

(vi) PAL effective date generally means

(ii) Reserved.

(iii) <u>Small emissions unit</u> means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (b)(23) of this section or in the Act, whichever is lower.

(iv) Major emissions unit means:

- (\underline{a}) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or
- (\underline{b}) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.
- (v) Plantwide applicability limitation (PAL) means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is federally enforceable and enforceable as a practical matter established source-wide in accordance with paragraphs (aa)(1) through (15) of this section.

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the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

- (vii) \underline{PAL} effective period means the period beginning with the PAL effective date and ending 10 years later.
- (viii) PAL major modification means, notwithstanding paragraphs (b)(2) and (b)(3) of this section (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

- (ix) PAL permit means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the State Implementation Plan, or the title V permit issued by the Administrator that establishes a PAL for a major stationary source.
- (x) <u>PAL pollutant</u> means the pollutant for which a PAL is established at a major stationary source.
- (xi) <u>Significant emissions unit</u> means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in paragraph (b)(23) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major

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- (vi) PAL effective date generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant. The PAL limit that was in effect prior to the change shall remain in effect until the PAL is effective.
- (vii) PAL effective period means the period beginning with the date of issuance of the PAL permit and ending 10 years later.
- (viii) Option (aa)-A](aa)(2)(viii)-A: [Use this option if the definition of "net emissions increase" has been included in the rule.]
- (viii) <u>PAL major modification</u> means, notwithstanding paragraphs (b)(2) and (b)(3) of this section (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level greater than the PAL.
- (viii) Option (aa)-A(aa)(2)(viii)-B: Use this option if the definition of "net emissions increase" has not been included in the rule.]
- (viii) PAL major modification means, notwithstanding paragraph (b)(2) of this section (the definition of major modification), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level greater than the PAI.
- (ix) <u>PAL permit</u> means the permit issued by the permitting authority that establishes a PAL for a major stationary source.
- $(\ensuremath{\mathbf{x}})$ $\underline{\ensuremath{\mathsf{PAL}}}$ pollutant for which a PAL is established at a major stationary source.
- (xi) <u>Significant emissions unit</u> means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in paragraph (b)(23) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that

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emissions unit as defined in paragraph (aa)(2)(iv) of this section.

would qualify the unit as a major emissions unit as defined in paragraph (aa)(2)(iv) of this section.

[Definitions for "PAL Baseline Period" and "PAL Baseline Emissions." Because the two definitions work together, the two options for these terms contain both definitions. Under either option, the standard baseline would be the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. Under Option [(aa)-A](aa)(2)(xii)&(xiii)-A, the permitting authority may authorize the use of a more representative time period within the past 5 years. Under Option [(aa)-A](aa)(2)(xii)&(xiii)-B, the permitting authority may establish a baseline based upon the highest 24 months of production within the past 5 years.

(xii)-(xiii) Option [(aa)A](aa)(2)(xii)&(xiii)-A (Most
Representative 2 of 5 Option):

(xii) PAL Baseline Period. The PAL baseline period is the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. The permitting authority may allow the use of a different 24 month period within the last 5 years upon a determination that the operations during that period would be more representative of normal source operations.

(xiii) <u>PAL Baseline emissions</u> means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (aa)(2)(xiii)(A) through (C) of this section.

- (\underline{a}) For any emissions unit that was an existing emissions unit during the PAL baseline period, PAL baseline emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the PAL baseline period.
- $(\underline{1})$ The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.
- $(\underline{2})$ The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the PAL baseline period.

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- $(\underline{3})$ The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the PAL baseline period.
- $(\underline{4})$ The average rate shall not be based in any period for which there is inadequate information either for determining emissions, in tons per year, or for adjustments required by paragraphs (aa)(xiii)(A)(1)-(3) of this section.
- (b) For any existing emissions unit that was not an existing emissions unit during the PAL baseline period but commenced operation during or after the selected PAL baseline period, the PAL baseline emissions shall equal the average rate in tons per year at which the unit emitted the pollutant during the two calendar years immediately preceding when the PAL application is submitted, adjusted pursuant to (aa)(xiii)(A).
- $(\underline{\mathbf{c}})$ For a new emissions unit, PAL baseline emissions shall equal zero.
- (\underline{d}) PAL baseline emissions shall be determined by measurement, calculations, estimations, and record keeping in the order of the following preferences:
- (1) Monitoring Systems
- (A) Continuous Emission Monitoring System (CEM) data integrated to annual emissions using flow meters and conversion factors.
- (B) Predictive Emission Monitoring
 System (PEMS)
- (2) Other Measurements and Calculations
 - (A) Stack emissions
 - (i) Determine hourly emissions by stack emission testing,
 - (ii) Determine annual operating hours using hour meter records, and
 - (iii) Calculate annual emissions using hourly emissions and annual operating hours, OR
 - (iv) Determine emissions per heat input by stack emission testing,
 - (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and

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- (vi) Calculate annual emissions using emissions per heat input and annual heat input.
- (B) Mass balance
 - (i) Determine the amount of materials used through measurements in the process,
 - (ii) Calculate emissions per mass of material used using mass balance techniques,
 - (iii) Determine amount of material used in a year, and
 - (iv) Calculate annual emissions using emissions per mass of material and amount of material used in a year.
- (C) Emission Factors
 - (i) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions,
 - (ii) Determine annual operating
 hours using hour meter records, and
 - (iii) Calculate annual emissions
 using hourly emissions and annual
 operating hours,

OR

- (iv) Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit,
- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions
 using emissions per heat input and
 annual heat input.
- (3) Recordkeeping: Instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records (such as production records, fuel consumption records, fuel purchase receipts, laboratory reports on fuel analysis, third party records such as electric bills, etc.)
- (A) Determine hourly emissions using stack emission tests, mass balance or emission factors,

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- (B) Determine annual hours of operation using production records, etc.,
- (C) Calculate annual emissions using hourly emissions and annual hours of operation,

OR

- (D) Determine emissions per heat input unit using stack emission tests, mass balance or emission factors,
- (E) Determine amount of fuel combusted in a year records and calculate annual heat input, and
- (F) Calculate annual emissions using emissions per heat input and annual heat input.

(xii)-(xiii) Option [(aa)A](aa)(2)(xii)&(xiii)-B (Highest Production 2 of 5 Option):

- (xii) <u>PAL Baseline Period</u>. The PAL baseline period is the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. In the alternative, the permitting authority may use the 24 month period when the production rate of the stationary source was the highest.
- (xiii) PAL Baseline emissions means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (aa)(2)(xiii)(A) through (C) of this section.
 - (\underline{a}) For any emissions unit that was an existing emissions unit during the PAL baseline period, PAL baseline emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the PAL baseline period unless the permitting authority selected as the PAL baseline period the highest 24 months of production within the past 5 years. In the latter event, PAL baseline emissions shall be established by calculating the average rate, in tons per year, based on current emissions data and the unit's utilization during the consecutive 24 month period of highest production within the last 5 years.
 - $(\underline{1})$ The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not

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include excess emissions or emissions associated with upsets or malfunctions.

- $(\underline{2})$ The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the PAL baseline period.
- $(\underline{3})$ The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the PAL baseline period.
- $(\underline{4})$ The average rate shall not be based in any period for which there is inadequate information either for determining emissions, in tons per year, or for adjustments required by paragraphs (aa)(xiii)(A)(1)-(3) of this section.
- (\underline{b}) For any existing emissions unit that was not an existing emissions unit during the PAL baseline period but commenced operation during or after the selected PAL baseline period, the PAL baseline emissions shall equal the average rate in tons per year at which the unit emitted the pollutant during the two calendar years immediately preceding when the PAL application is submitted, adjusted pursuant to (aa)(xiii)(A).
- (\underline{c}) For a new emissions unit, PAL baseline emissions shall equal zero.
- (\underline{d}) PAL baseline emissions shall be determined by measurement, calculations, estimations, and record keeping in the order of the following preferences:
- $(\underline{1})$ Monitoring Systems
 - (A) Continuous Emission Monitoring System (CEM) data integrated to annual emissions using flow meters and conversion factors.
 - (B) Predictive Emission Monitoring
 System (PEMS)
- (2) Other Measurements and Calculations

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- (A) Stack emissions
- (i) Determine hourly emissions by stack emission testing,
- (ii) Determine annual operating
 hours using hour meter records, and
- (iii) Calculate annual emissions
 using hourly emissions and annual
 operating hours, OR
- (iv) Determine emissions per heat input by stack emission testing,
- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions
 using emissions per heat input and
 annual heat input.
- (B) Mass balance
- (i) Determine the amount of materials used through measurements in the process,
- (ii) Calculate emissions per mass of material used using mass balance techniques,
- (iii) Determine amount of material
 used in a year, and
- (iv) Calculate annual emissions using emissions per mass of material and amount of material used in a year.
- (C) Emission Factors
- (i) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions,
- (\mbox{ii}) Determine annual operating hours using hour meter records, and
- (iii) Calculate annual emissions using hourly emissions and annual operating hours,

OR

(iv) Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit,

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- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions
 using emissions per heat input and
 annual heat input.
- (3) Recordkeeping: Instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records (such as production records, fuel consumption records, fuel purchase receipts, laboratory reports on fuel analysis, third party records such as electric bills, etc.)
 - (A) Determine hourly emissions using stack emission tests, mass balance or emission factors,
 - (B) Determine annual hours of operation using production records, etc.,
 - (C) Calculate annual emissions using hourly emissions and annual hours of operation,

OR

- (D) Determine emissions per heat input unit using stack emission tests, mass balance or emission factors,
- (E) Determine amount of fuel combusted in a year records and calculate annual heat input, and
- (F) Calculate annual emissions using emissions per heat input and annual heat input.
- (3) Permit application requirements. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the permitting authority for approval:
- (i) A list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission
- (3) <u>Permit application requirements</u>. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the Administrator for approval:
- (i) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate

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which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit.

- (ii) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.
- (iii) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (aa)(13)(i) of this section.

(4) <u>General requirements for</u> establishing PALs.

- (i) The Administrator is allowed to establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs $(aa)(4)(i)(\underline{a})$ through (\underline{q}) of this section are met.
- (a) The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less

limitations, or work practices apply to each unit.

- (ii) Calculations of the PAL baseline emissions, with supporting documentation, for all emission units at the source.
- (iii) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (aa)(13)(i) of this section.
- (iv) A demonstration that a source operating under the PAL will not have an adverse air quality impact. The permitting authority may require that the demonstration include any or all of the requirements set forth in paragraphs (k) through (p) of this section.
- (v) Any other information required by the permitting authority.

(4) <u>General requirements for</u> establishing PALs.

- (i) The permitting authority may establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs (aa)(4)(i)(\underline{a}) through (\underline{h}) of this section are met.
- (\underline{a}) The PAL shall impose an emission limitation that is federally enforceable and enforceable as a practical matter, for the entire major stationary source.

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than the PAL.

- (\underline{b}) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (aa)(5) of this section.
- (\underline{c}) The PAL permit shall contain all the requirements of paragraph (aa)(7) of this section.
- (\underline{d}) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.
- $(\underline{e}\,)$ Each PAL shall regulate emissions of only one pollutant.
- (\underline{f}) Each PAL shall have a PAL effective period of 10 years.
- (g) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (aa)(12) through (14) of this section for each emissions unit under the PAL through the PAL effective period.

- (ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under §51.165(a)(3)(ii) of this chapter unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.
- (5) <u>Public participation requirements</u> <u>for PALs</u>. PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with §§51.160 and

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- (\underline{b}) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (q) of this section.
- (\underline{c}) The PAL permit shall contain all the requirements of paragraph (aa)(7) of this section.
- (\underline{d}) The PAL shall be set in accordance with the requirements of paragraph (aa)(6) of this section.
 - (\underline{e}) Each PAL shall regulate emissions of only one pollutant.
- (\underline{f}) Each PAL shall a term of no more than 10 years.
- (g) The PAL permit shall contain monitoring, recordkeeping and reporting conditions consistent with paragraphs (aa)(12) through (14) of this section.
- (h) The owner or operator demonstrates that no adverse air quality impact will result from operating under the PAL, using the provisions of paragraphs (k) through (p) of this section as applicable, and using for its analysis the allowable emissions from each emissions unit.
- (i) The owner or operator of a major stationary source with a PAL shall install BACT with respect to the PAL pollutant on any new significant or reconstructed major emissions unit for which construction is commenced during the PAL effective period.
- (ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under §51.165(a)(3)(ii) of this chapter unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.
- (5) Reserved.

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- 51.161 of this chapter. This includes the requirement that the Administrator provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The Administrator must address all material comments before taking final action on the permit.
- Setting the 10-year actuals PAL level. The actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in paragraph (b)(48) of this section) of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(23) of this section or under the Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shutdown after this 24-month period must be subtracted from the PAL level. Emissions from units on which actual construction began after the 24month period must be added to the PAL level in an amount equal to the potential to emit of the units. The Administrator shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the Administrator is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).
- (7) Contents of the PAL permit. The PAL permit must contain, at a minimum, the information in paragraphs (aa)(7)(i) through (x) of this section.
- (i) The PAL pollutant and the applicable source-wide emission limitation in tons per year.

- (6) <u>Setting the actuals PAL level</u>.
 - (i) The initial PAL level for a major stationary source shall be established as provided in paragraphs $(aa)(6)(i)(\underline{a})$ through (c) of this section:
 - (\underline{a}) the significant level for the PAL pollutant under paragraph (b)(23) of this section or under the Act, whichever is lower; plus
 - (\underline{b}) the PAL baseline emissions of the PAL pollutant for each emissions unit at the source at the time the application is submitted; however
 - (\underline{c}) PAL baseline emissions from any emissions unit that has been permanently shut down should not be included.
 - (ii) The permitting authority shall establish a future effective PAL adjustment in the PAL permit to reflect a reduction (in tons/year) for any applicable federal or state regulatory requirement with a future compliance date.

- (7) Contents of the PAL permit. The PAL permit must contain, at a minimum, the information in paragraphs (aa)(7)(i) through (x) of this section.
 - (i) The PAL pollutant and the applicable source-wide emission limitations in tons per year and their effective dates.

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- (ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).
- (iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (aa)(10) of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by a reviewing authority.
- (iv) A requirement that emission
 calculations for compliance purposes must
 include emissions from startups,
 shutdowns, and malfunctions.
- (v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (aa)(9) of this section.
- (vi) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by paragraph (aa)(13)(i) of this section.
- (vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (aa)(12) of this section.
- (viii) A requirement to retain the records required under paragraph (aa)(13) of this section on site. Such records may be retained in an electronic format.
- (ix) A requirement to submit the reports required under paragraph (aa)(14) of this section by the required deadlines.
- (x) Any other requirements that the Administrator deems necessary to implement and enforce the PAL.
- (8) PAL effective period and reopening of the PAL permit. The requirements in paragraphs (aa)(8)(i) and (ii) of this

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- (ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).
- (iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (aa)(10) of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until final action is taken by the permitting authority on the application for renewal.
- (iv) A requirement that emission calculations for compliance purposes must include any noncompliant emissions in excess of any emissions limitations, emissions associated with startup and shutdown, and emissions associated with upsets or malfunctions.
- (v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (aa)(9) of this section.
- (vi) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by paragraph (aa)(13)(i) of this section.
- (vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (aa)(12) of this section.
- (viii) A requirement to retain the records required under paragraph (aa)(13) of this section on site. Such records may be retained in an electronic format.
 - (ix) A requirement to submit the reports required under paragraph (aa)(14) of this section by the required deadlines.
 - (x) Any other requirements that the permitting authority deems necessary to implement and enforce the PAL.
- (8) PAL effective period and reopening of the PAL permit.

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section apply to actuals PALs.

- (i) <u>PAL effective period</u>. The Administrator shall specify a PAL effective period of 10 years.
 - (ii) Reopening of the PAL permit.
- (\underline{a}) During the PAL effective period, the Administrator must reopen the PAL permit to:
- $(\underline{1})$ Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
- (2) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under \$51.165(a)(3)(ii) of this chapter; and
- $(\underline{3})$ Revise the PAL to reflect an increase in the PAL as provided under paragraph (aa)(11) of this section.

- (\underline{b}) The Administrator shall have discretion to reopen the PAL permit for the following:
- $(\underline{1})$ Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date;
- $(\underline{2})$ Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the State may impose on the major stationary source under the State Implementation Plan; and
- $(\underline{3})$ Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been

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- i) <u>PAL effective period</u>. The permitting authority shall specify a PAL effective period of no more than 10 years.
 - (ii) Reopening of the PAL permit.
 - (\underline{a}) During the PAL effective period, the permitting authority must reopen the PAL permit to:
 - $(\underline{1})$ Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
- $(\underline{2})$ Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets;
- $(\underline{3})$ Revise the PAL to reflect an increase in the PAL as provided under paragraph (aa)(11) of this section;
- (4) Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public; and
- (5) Reduce the PAL to reflect newly applicable requirements (for example, NSPS) with compliance dates after the PAL effective date.
- (\underline{b}) The permitting authority shall have discretion to reopen the PAL permit for cause consistent with [insert reference to Title V requirement based on 40 C.F.R. § 70.7(f)]

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identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.

- (c) Except for the permit reopening in paragraph (aa)(8)(ii)(\underline{a})($\underline{1}$) of this section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (aa)(5) of this section.
- (9) Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in paragraph (aa)(10) of this section shall expire at the end of the PAL effective period, and the requirements in paragraphs (aa)(9)(i) through (v) of this section shall apply.
- (i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (aa)(9)(i)(\underline{a}) and (\underline{b}) of this section.
- (a) Within the time frame specified for PAL renewals in paragraph (aa)(10)(ii) of this section, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Administrator) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (aa)(10)(v) of this section, such distribution shall be made as if the PAL had been adjusted.
- (\underline{b}) The Administrator shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Administrator determines is appropriate.

- (\underline{c}) Except for the permit reopening in paragraph $(aa)(8)(ii)(\underline{b})$ of this section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (aa)(5) of this section.
 - (9) Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in paragraph (aa)(10) of this section shall expire at the end of the PAL effective period, and the requirements in paragraphs (aa)(9)(i) through (v) of this section shall apply.
 - (i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs $(aa)(9)(i)(\underline{a})$ and (\underline{b}) of this section.
 - Within the time frame specified for PAL renewals in paragraph (aa)(10)(ii) of this section, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the permitting authority) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (aa)(10)(v) of this section, such distribution shall be made as if the PAL had been adiusted.
 - (\underline{b}) The permitting authority shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the permitting authority determines is appropriate.

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- (ii) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Administrator may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.
- (iii) Until the Administrator issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph $(aa)(9)(i)(\underline{b})$ of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (iv) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in paragraph (b)(2) of this section.
- (v) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to paragraph (r)(4) of this section, but were eliminated by the PAL in accordance with the provisions in paragraph $(aa)(1)(ii)(\underline{c})$ of this section.

(10) Renewal of a PAL.

- (i) The Administrator shall follow the procedures specified in paragraph (aa)(5) of this section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Administrator.
- (ii) <u>Application deadline</u>. A major stationary source owner or operator shall submit a timely application to the Administrator to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but

(ii) Reserved.

- (iii) Until the permitting authority issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph $(aa)(9)(i)(\underline{b})$ of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (iv) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in paragraph (b)(2) of this section.
- (v) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.).

(10) Renewal of a PAL.

- (i) The permitting authority shall follow the procedures specified in paragraph (aa)(5) of this section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the permitting authority.
- (ii) Application deadline. A major stationary source owner or operator shall submit a timely application to the permitting authority to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior

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not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

- (iii) <u>Application requirements</u>. The application to renew a PAL permit shall contain the information required in paragraphs (aa)(10)(iii)(\underline{a}) through (\underline{d}) of this section.
- (\underline{a}) The information required in paragraphs (aa)(3)(i) through (iii) of this section.
 - (b) A proposed PAL level.
- (\underline{c}) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
- (\underline{d}) Any other information the owner or operator wishes the Administrator to consider in determining the appropriate level for renewing the PAL.
- (iv) <u>PAL adjustment</u>. In determining whether and how to adjust the PAL, the Administrator shall consider the options outlined in paragraphs (aa)(10)(iv)(\underline{a}) and (\underline{b}) of this section. However, in no case may any such adjustment fail to comply with paragraph (aa)(10)(iv)(\underline{c}) of this section.

 (\underline{a}) If the emissions level calculated in accordance with paragraph (aa)(6) of this section is equal to or greater than 80 percent of the PAL level, the Administrator may renew the PAL at the same level without considering the

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- to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the permitting authority takes final action on the application for renewal.
- (iii) <u>Application requirements</u>. The application to renew a PAL permit shall contain the information required in paragraphs (aa)(10)(iii)(\underline{a}) through (\underline{d}) of this section.
- (\underline{a}) The information required in paragraphs (aa)(3)(i) through (iii) of this section.
 - (b) A proposed PAL level.
- (\underline{c}) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
- (\underline{d}) Any other information the owner or operator wishes the permitting authority to consider in determining the appropriate level for renewing the PAL.
- (\underline{e}) Additional information as requested by the permitting authority to make a determination on the renewal request.
- (iv) <u>PAL adjustment</u>. In determining whether and how to adjust the PAL, the permitting authority shall consider the options outlined in paragraph (aa)(10)(iv)(\underline{a}) of this section. However, in no case may any such adjustment fail to comply with paragraph (aa)(10)(iv)(\underline{b}) of this section.
- (\underline{a}) [Two options are presented here. The first gives the permitting authority some discretion in adjusting the PAL level. The second makes the adjustment automatic.
- (a) Suboption (aa)(10)(iv)(a)-A in Option (aa)-A:
- (\underline{a}) The permitting authority may set the PAL at a level that he or she determines to be more representative of the source's PAL baseline emissions determined from the date of the renewal application, or that he or she determines to be more

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factors set forth in paragraph $(aa)(10)(iv)(\underline{b})$ of this section; or

- (\underline{b}) The Administrator may set the PAL at a level that he or she determines to be more representative of the source's baseline actual emissions, or that he or she determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Administrator in his or her written rationale.
- (\underline{c}) Notwithstanding paragraphs (aa)(10)(iv)(\underline{a}) and (\underline{b}) of this section:
- $(\underline{1})$ If the potential to emit of the major stationary source is less than the PAL, the Administrator shall adjust the PAL to a level no greater than the potential to emit of the source; and
- $(\underline{2})$ The Administrator shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (aa)(11) of this section (increasing a PAL).
- (v) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the Administrator has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first.
- (11) <u>Increasing a PAL during the PAL</u> effective period.
- (i) The Administrator may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs $(aa)(11)(i)(\underline{a})$ through (d) of this section.
- (\underline{a}) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

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appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the permitting authority in his or her written rationale.

Suboption (aa)(10)(iv)(a)-B in Option (aa)-A:

- (\underline{a}) The permitting authority shall set the PAL at the lower of the current PAL or the PAL baseline emissions as established on the date of the renewal application, plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(23).
- (\underline{b} Notwithstanding paragraph (aa)(10)(iv)(\underline{a}) of this section:
- $(\underline{1})$ If the potential to emit of the major stationary source is less than the PAL, the permitting authority shall adjust the PAL to a level no greater than the potential to emit of the source; and
- $(\underline{2})$ The permitting authority shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (aa)(11) of this section (increasing a PAL).
- (v) If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the permitting authority has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first.
- (11) <u>Increasing a PAL during the PAL</u> effective period.
 - (i) The permitting authority may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (aa)(11)(i)(\underline{a}) through (\underline{d}) of this section.
- (\underline{a}) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

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- As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.
- (\underline{c}) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph $(aa)(11)(\underline{i})(\underline{a})$ of this section, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.
- (\underline{d}) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (ii) The Administrator shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with paragraph (aa)(11)(i)(\underline{b})), plus the sum of the baseline actual emissions of the small emissions units.
- (iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice

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As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the PAL baseline emissions of the small emissions units, plus the sum of the PAL baseline emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted.

 (\underline{c}) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (aa)(11)(i)(a) of this section.

- (\underline{d}) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (ii) The permitting authority shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the PAL baseline emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with paragraph (aa)(11)(i)(\underline{b})), plus the sum of the PAL baseline emissions of the small emissions units, plus the significance level.
 - (iii) The PAL permit shall be revised to reflect the increased PAL level

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requirements of paragraph (aa)(5) of this section.

- (12) Monitoring requirements for PALs.
 - (i) General requirements.
- (a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
- (\underline{b}) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (aa)(12)(ii)(\underline{a}) through (\underline{d}) of this section and must be approved by the Administrator.
- (\underline{c}) Notwithstanding paragraph (aa)(12)(i)(\underline{b}) of this section, you may also employ an alternative monitoring approach that meets paragraph (aa)(12)(i)(\underline{a}) of this section if approved by the Administrator.
- (\underline{d}) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.
- (ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (aa)(12)(iii) through (ix) of this section:
- (\underline{a}) Mass balance calculations for activities using coatings or solvents;
 - (b) CEMS;
 - (c) CPMS or PEMS; and
 - (d) Emission factors.

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pursuant to the public notice requirements of paragraph (aa)(5) of this section.

- (12) Monitoring requirements for PALs.
- (i) General requirements.
- (a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
- (\underline{b}) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (aa)(12)(ii)(\underline{a}) through (\underline{d}) of this section and must be approved by the permitting authority.
- (<u>c</u>) Notwithstanding paragraph (aa)(12)(i)(<u>b</u>) of this section, the owner or operator may employ an alternative monitoring approach that meets paragraph (aa)(12)(i)(\underline{a}) of this section if approved by the permitting authority.
- (\underline{d}) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.
- (ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (aa)(12)(iii) through (ix) of this section:
- (\underline{a}) Mass balance calculations for activities using coatings or solvents and sulfur dioxide calculations for fuel burning sources;
 - (b) CEMS; and
 - (c) CPMS or PEMS;
- (\underline{d}) Emissions factors for small emissions units if mass balance calculations specified under (a) are not feasible.

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- (iii) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:
- (\underline{a}) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
- (\underline{b}) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
- (<u>c</u>) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Administrator determines there is sitespecific data or a site-specific monitoring program to support another content within the range.
- (iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
- (\underline{a}) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and
- (\underline{b}) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
- (v) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
- (\underline{a}) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and
- (\underline{b}) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Administrator, while the emissions unit is operating.

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- (iii) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:
- (\underline{a}) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
- (\underline{b}) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
- (\underline{c}) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the permitting authority determines there is sitespecific data or a site-specific monitoring program to support another content within the range.
- (iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
- (\underline{a}) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and
- (\underline{b}) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
- (v) CPMS or PEMS. An owner or operator
 using CPMS or PEMS to monitor PAL
 pollutant emissions shall meet the
 following requirements:
- (\underline{a}) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and
- (\underline{b}) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the permitting authority, while the emissions unit is operating.

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- (vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
- (\underline{a}) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
- (\underline{b}) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
- (<u>c</u>) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the Administrator determines that testing is not required.
- (vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
- (viii) Notwithstanding the requirements in paragraphs (aa)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Administrator shall, at the time of permit issuance:
- (\underline{a}) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or
- (\underline{b}) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.
- (ix) Re-validation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the Administrator. Such testing must occur at least once every 5 years after

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- (vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
- (\underline{a}) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development; and
- (\underline{b}) The emissions unit shall operate within the designated range of use for the emission factor, if applicable.

- (vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
- (viii) Notwithstanding the requirements in paragraphs (aa)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the permitting authority shall, at the time of permit issuance:
- (\underline{a}) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or
- (\underline{b}) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.
- (ix) Re-validation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the permitting authority. Such

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issuance of the PAL.

(13) Recordkeeping requirements.

- (i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (aa) of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.
- (ii) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:
- (<u>a</u>) A copy of the PAL permit application and any applications for revisions to the PAL; and
- (\underline{b}) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.
- (14) Reporting and notification requirements. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Administrator in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (aa)(14)(i) through (iii) of this section.
- (i) Semi-annual report. The semi-annual report shall be submitted to the Administrator within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (aa)(14)(i)(\underline{a}) through (\underline{g}) of this section.
- (\underline{a}) The identification of owner and operator and the permit number.
- (\underline{b}) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (aa)(13)(i) of this section.
- (\underline{c}) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

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testing must occur at least once every 5 years after issuance of the PAL.

(13) Recordkeeping requirements.

- (i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (aa) of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.
- (ii) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:
- (\underline{a}) A copy of the PAL permit application and any applications for revisions to the PAL; and
- (\underline{b}) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.
- (14) Reporting and notification requirements. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the permitting authority in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (aa)(14)(i) through (iii) of this section.
 - (i) <u>Semi-annual report</u>. The semi-annual report shall be submitted to the permitting authority within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs $(aa)(14)(i)(\underline{a})$ through (\underline{g}) of this section.
 - (\underline{a}) The identification of owner and operator and the permit number.
 - (\underline{b}) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (aa)(13)(i) of this section.
 - (\underline{c}) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

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- $(\underline{d})\,$ A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
- (\underline{e}) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
- (\underline{f}) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by (aa)(12)(vii).
- (\underline{g}) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

- (ii) <u>Deviation report</u>. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to §70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing \$70.6(a)(3)(iii)(B) of this chapter. The reports shall contain the following information:
- (\underline{a}) The identification of owner and operator and the permit number;
- (\underline{b}) The PAL requirement that experienced the deviation or that was exceeded;

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- (\underline{d}) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
- (\underline{e}) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
- (\underline{f}) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by (aa)(12)(vii).
- (g) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (\underline{h}) If new control equipment is being installed pursuant to paragraph (aa)(4)(i)(i) of this section, a description of the control equipment to be installed and the potential to emit and projected actual emissions from the applicable unit.
- (ii) <u>Deviation report</u>. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedances of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to [cite to Title V program analog to 40 CFR \$70.6(a)(3)(iii)(B)] shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by [cite to Title V program analog to 40 CFR \$70.6(a)(3)(iii)(B)]. The reports shall contain the following information:
- (\underline{a}) The identification of owner and operator and the permit number;
- (\underline{b}) The PAL requirement that experienced the deviation or that was exceeded;

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- (\underline{c}) Emissions resulting from the deviation or the exceedance; and
- (\underline{d}) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (iii) <u>Re-validation results</u>. The owner or operator shall submit to the Administrator the results of any revalidation test or method within 3 months after completion of such test or method.

(15) Transition requirements.

- (i) The Administrator may not issue a PAL that does not comply with the requirements in paragraphs (aa)(1) through (15) of this section after March 3, 2003.
- (ii) The Administrator may supersede any PAL that was established prior to March 3, 2003 with a PAL that complies with the requirements of paragraphs (aa)(1) through (15) of this section.

- (\underline{c}) Emissions resulting from the deviation or the exceedance; and
- $(\underline{d})\,$ A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (iii) <u>Re-validation results</u>. The owner or operator shall submit to the permitting authority the results of any re-validation test or method within 3 months after completion of such test or method.
- (15) Reserved.

Option (aa)-B: <u>Declining Actuals PAL</u>. The provisions in paragraphs (aa)(1) through (15) of this section govern Declining Actuals PALs.

(1) Applicability.

- (i) The permitting authority may approve the use of a Declining Actuals PAL for any existing major stationary source if the PAL meets the requirements in paragraphs (aa)(1) through (15) of this section. The term "PAL" shall mean "Declining Actuals PAL" throughout paragraph (aa) of this section.
- (ii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (aa)(1) through (15) of this section, and complies with the PAL permit:

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- (\underline{a}) Is not a major modification for the PAL pollutant; and
- (\underline{b}) Does not have to be approved through the PSD program.
- (iii) Any major stationary source operating under a PAL permit shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL, including any enforceable emissions limitations that the source used to avoid applicability with the major NSR program unless such source complies the provisions of (r)(4) of this section.
- (2) <u>Definitions</u>. For the purposes of this section, the definitions in paragraphs (aa)(2)(i) through (xiii) of this section apply. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (b) of this section or in the Act.
- (i) <u>Declining Actuals PAL</u> for a major stationary source means a PAL, determined consistent with the procedures of paragraph (aa).
 - (ii) Reserved.
- (iii) <u>Small emissions unit</u> means any emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (b)(23) of this section or in the Act, whichever is lower.
- (iv) <u>Major emissions unit</u> means any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area.
- (v) <u>Plantwide applicability limitation</u> (<u>PAL</u>) means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is federally enforceable and enforceable as a practical matter established source-wide in accordance with paragraphs (aa)(1) through (15) of this section.
- (vi) <u>PAL effective date</u> generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major

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modification becomes operational and begins to emit the PAL pollutant. The PAL limit that was in effect prior to the change shall remain in effect until the new PAL is effective.

(vii) Reserved.

(viii) <u>PAL major modification</u> Option (aa)-B](aa)(2)(viii)-A: [Use this option if the definition of "net emissions increase" has been included in the rule.]

(viii) PAL major modification means, notwithstanding paragraphs (b)(2) and (b)(3) of this section (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level greater than the PAI.

(viii) Option [(aa)-B](aa)(2)(viii)-B:
Use this option if the definition of "net
emissions increase" has not been included
in the rule.]

(viii) <u>PAL major modification</u> means, notwithstanding paragraph (b)(2) of this section (the definition of major modification), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level greater than the PAL

- (ix) <u>PAL permit</u> means the permit issued by the permitting authority that establishes a PAL for a major stationary source.
- (x) \underline{PAL} pollutant means the pollutant for which a PAL is established at a major stationary source.
- (xi) <u>Significant emissions unit</u> means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in paragraph (b)(23) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (aa)(2)(iv) of this section.

(xii) and (xiii) [Definitions for "PAL
Baseline Period" and "PAL Baseline
Emissions." Because the two definitions

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work together, the two options for these terms contain both definitions. Under either option, the standard baseline would be the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. Under Option [(aa)-B](aa)(2)(xii)&(xiii)-A, the permitting authority may authorize the use of a more representative time period within the past 5 years. Under Option [(aa)-B](aa)(2)(xii)&(xiii)-B, the permitting authority may establish a baseline based upon the highest 24 months of production within the past 5 years.

Option [(aa)-B](aa)(2)(xii)&(xiii)-A (Most Representative 2 of 5 Option):

- (xii) <u>PAL Baseline Period</u>. The PAL baseline period is the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. The permitting authority may allow the use of a different 24 month period within the last 5 years upon a determination that the operations during that period would be more representative of normal source operations.
- (xiii) <u>PAL Baseline emissions</u> means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (aa)(2)(xiii)(A) through (C) of this section.
- (\underline{a}) For any emissions unit that was an existing emissions unit during the PAL baseline period, PAL baseline emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the PAL baseline period.
- (1) The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.
- (2) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the PAL baseline period.
- (3) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major

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stationary source must currently comply, had such major stationary source been required to comply with such limitations during the PAL baseline period.

- (4) The average rate shall not be based in any period for which there is inadequate information either for determining emissions, in tons per year, or for adjustments required by paragraphs (aa)(xiii)(A)(1)-(3) of this section.
- (<u>b</u>) For any existing emissions unit that was not an existing emissions unit during the PAL baseline period but commenced operation during or after the selected PAL baseline period, the PAL baseline emissions shall equal the average rate in tons per year at which the unit emitted the pollutant during the two calendar years immediately preceding when the PAL application is submitted, adjusted pursuant to (aa)(xiii)(A).
- (\underline{c}) For a new emissions unit, PAL baseline emissions shall equal zero.
- (\underline{d}) PAL baseline emissions shall be determined by measurement, calculations, estimations, and record keeping in the order of the following preferences:
 - (1) Monitoring Systems
 - (A) Continuous Emission Monitoring System (CEM) data integrated to annual emissions using flow meters and conversion factors.
 - (B) Predictive Emission Monitoring System (PEMS)
 - $(\underline{2})$ Other Measurements and Calculations
 - (A) Stack emissions
 - (i) Determine hourly emissions by stack emission testing,
 - (\mbox{ii}) Determine annual operating hours using hour meter records, and
 - (iii) Calculate annual emissions using hourly emissions and annual operating hours, OR
 - (iv) Determine emissions per heat input by stack emission testing,
 - $(\ensuremath{\mathbf{v}})$ Determine amount of fuel combusted in a year using fuel flow

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meter record and calculate annual
heat input, and

- (vi) Calculate annual emissions
 using emissions per heat input and
 annual heat input.
- (B) Mass balance
- (i) Determine the amount of materials used through measurements in the process,
- (ii) Calculate emissions per mass of material used using mass balance techniques,
- (iii) Determine amount of material
 used in a year, and
- (iv) Calculate annual emissions using emissions per mass of material and amount of material used in a year.
- (C) Emission Factors
- (i) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions,
- (ii) Determine annual operating
 hours using hour meter records, and
- (iii) Calculate annual emissions using hourly emissions and annual operating hours,

OR

- (iv) Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit,
- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions
 using emissions per heat input and
 annual heat input.
- $(\underline{3})$ Recordkeeping: Instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records (such as production records, fuel consumption records, fuel purchase receipts, laboratory reports on fuel

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analysis, third party records such as electric bills, etc.)

- (A) Determine hourly emissions using stack emission tests, mass balance or emission factors,
- (B) Determine annual hours of operation using production records, etc.,
- (C) Calculate annual emissions using hourly emissions and annual hours of operation, OR
- (D) Determine emissions per heat input unit using stack emission tests, mass balance or emission factors.
- (E) Determine amount of fuel combusted in a year records and calculate annual heat input, and
- (F) Calculate annual emissions using emissions per heat input and annual heat input.

(xii) and (xiii) Option [(aa)B](aa)(2)(xii)&(xiii)-B (Highest Production 2 of 5 Option):

- (xii) <u>PAL Baseline Period</u>. The PAL baseline period is the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. In the alternative, the permitting authority may use the 24 month period when the production rate of the stationary source was the highest.
- (xiii) PAL Baseline emissions means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (aa)(2)(xiii)(A) through (C) of this section.
- (\underline{a}) For any emissions unit that was an existing emissions unit during the PAL baseline period, PAL baseline emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the PAL baseline period unless the permitting authority selected as the PAL baseline period the highest 24 months of production within the past 5 years. In the latter event, PAL baseline emissions shall be established by calculating the average rate, in tons per year, based on current emissions data and the unit's utilization during the consecutive 24 month period of highest production within the last 5 years.

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- $(\underline{1})$ The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.
- $(\underline{2})$ The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the PAL baseline period.
- $(\underline{3})$ The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the PAL baseline period.
- $(\underline{4})$ The average rate shall not be based in any period for which there is inadequate information either for determining emissions, in tons per year, or for adjustments required by paragraphs (aa)(xiii)(A)(1)-(3) of this section.
- (<u>b</u>) For any existing emissions unit that was not an existing emissions unit during the PAL baseline period but commenced operation during or after the selected PAL baseline period, the PAL baseline emissions shall equal the average rate in tons per year at which the unit emitted the pollutant during the two calendar years immediately preceding when the PAL application is submitted, adjusted pursuant to (aa)(xiii)(A).
- (\underline{c}) For a new emissions unit, PAL baseline emissions shall equal zero.
- (\underline{d}) PAL baseline emissions shall be determined by measurement, calculations, estimations, and record keeping in the order of the following preferences:
 - (1) Monitoring Systems
 - (A) Continuous Emission Monitoring System (CEM) data integrated to annual emissions using flow meters and conversion factors.
 - (B) Predictive Emission Monitoring
 System (PEMS)
- (2) Other Measurements and Calculations

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- (A) Stack emissions
- (i) Determine hourly emissions by stack emission testing,
- (ii) Determine annual operating hours using hour meter records, and $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}{2}$
- (iii) Calculate annual emissions
 using hourly emissions and annual
 operating hours,

OR

- (iv) Determine emissions per heat input by stack emission testing,
- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- $% \left(\left\langle v\right\rangle \right)$ Calculate annual emissions using emissions per heat input and annual heat input.
 - (B) Mass balance
- (i) Determine the amount of materials used through measurements in the process,
- (ii) Calculate emissions per mass of material used using mass balance techniques,
- (iii) Determine amount of material used in a year, and
- (iv) Calculate annual emissions using emissions per mass of material and amount of material used in a year.
 - (C) Emission Factors
- (i) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions,
- $\begin{tabular}{ll} (ii) & {\tt Determine annual operating} \\ & {\tt hours using hour meter records, and} \\ \end{tabular}$
- (iii) Calculate annual emissions
 using hourly emissions and annual
 operating hours,

OR

(iv) Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit,

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- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions
 using emissions per heat input and annual
 heat input.
- (3) Recordkeeping: Instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records (such as production records, fuel consumption records, fuel purchase receipts, laboratory reports on fuel analysis, third party records such as electric bills, etc.)
- (A) Determine hourly emissions using stack emission tests, mass balance or emission factors,
- (B) Determine annual hours of operation using production records, etc.,
- (C) Calculate annual emissions using hourly emissions and annual hours of operation,

OR

- (D) Determine emissions per heat input unit using stack emission tests, mass balance or emission factors,
- $\mbox{(E)}$ Determine amount of fuel combusted in a year records and calculate annual heat input, and
- $\mbox{(F)}$ Calculate annual emissions using emissions per heat input and annual heat input.
 - (3) <u>Permit application requirements</u>. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the permitting authority for approval:
- (i) A list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.

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- (ii) Calculations of the PAL baseline emissions, with supporting documentation, for all emission units at the source.
- (iii) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (aa)(13)(i) of this section.
- (iv) A demonstration that a source operating under the PAL will not have an adverse air quality impact. The permitting authority may require that the demonstration include any or all of the requirements set forth in paragraphs (k) through (p) of this section.
- (v) Any other information required by the permitting authority.
- (4) <u>General requirements for</u> establishing PALs.
- (i) The permitting authority may establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs $(aa)(4)(i)(\underline{a})$ through (\underline{h}) of this section are met.
- (\underline{a}) The PAL shall impose an emission limitation that is federally enforceable and enforceable as a practical matter, for the entire major stationary source.
- (\underline{b}) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (q) of this section.
- (\underline{c}) The PAL permit shall contain all the requirements of paragraph (aa)(7) of this section.
- (\underline{d}) The PAL shall be set in accordance with the requirements of paragraph (aa)(6) of this section.
- (\underline{e}) Each PAL shall regulate emissions of only one pollutant.
- (\underline{f}) Each PAL shall have a term of no more than 10 years.
- (\underline{g}) The PAL permit shall contain monitoring, recordkeeping and reporting conditions consistent with paragraphs (aa)(12) through (14) of this section.

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- (h) The owner or operator demonstrates that no adverse air quality impact will result from operating under the PAL, using the provisions of paragraphs (k) through (p) of this section as applicable, and using for its analysis the allowable emissions from each emissions unit.
- (5) <u>Reserved</u>.
- (6) Setting the PAL level.
- (i) The initial PAL level for a major stationary source shall be established as provided in paragraphs (aa)(6)(i)(a) through (c) of this section:
- (\underline{a}) the significant level for the PAL pollutant under paragraph (b)(23) of this section or under the Act, whichever is lower; plus
- (\underline{b}) the PAL baseline emissions of the PAL pollutant for each emissions unit at the source at the time the application is submitted; however
- (\underline{c}) PAL baseline emissions from any emissions unit that has been permanently shut down should not be included.
- (ii) The permitting authority shall establish a future effective PAL adjustment in the PAL permit to reflect a reduction (in tons/year) for any applicable federal or state regulatory requirement with a future compliance date.
- (iii) At a point five years after the PAL
 effective date, the PAL level shall be
 set at the lower of either:
- (\underline{a}) the level set in paragraph (aa)(6)(i) of this section, or
- (\underline{b}) the level equal to the allowable emissions of each significant and major unit, if BACT were installed at each significant or major unit, plus the PAL baseline emissions from each small emissions unit, plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(23) or under the Act, whichever is lower.
- (7) Contents of the PAL permit. The PAL permit must contain, at a minimum, the information in paragraphs (aa)(7)(i) through (x) of this section.

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- (i) The PAL pollutant and the applicable source-wide emission limitations in tons per year and their effective dates.
- (ii) The PAL effective date and the expiration date of the PAL.
- (iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (aa)(10) of this section, then the PAL shall remain in effect until final action is taken by the permitting authority on the application for renewal.
- (iv) A requirement that emission calculations for compliance purposes must include any noncompliant emissions in excess of any emissions limitations, emissions associated with startup and shutdown, and emissions associated with upsets or malfunctions.
- (v) A requirement that, once the PAL
 expires, the major stationary source is
 subject to the requirements of paragraph
 (aa)(9) of this section.
- (vi) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by paragraph (aa)(13)(i) of this section.
- (vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (aa)(12) of this section.
- (viii) A requirement to retain the records required under paragraph (aa)(13) of this section on site. Such records may be retained in an electronic format.
- (ix) A requirement to submit the reports required under paragraph (aa)(14) of this section by the required deadlines.
- (x) Any other requirements that the permitting authority deems necessary to implement and enforce the PAL.
- (8) $\underline{\text{PAL expiration and reopening of the}}$ $\underline{\text{PAL permit.}}$
- (i) $\underline{\mathtt{PAL}}\ \underline{\mathtt{expiration}}.$ The permitting authority shall specify a PAL expiration

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date that shall be no later than 10 years from the date of permit issuance.

- (ii) Reopening of the PAL permit.
- (\underline{a}) The permitting authority must reopen the PAL permit to:
- $(\underline{1})$ Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
- $(\underline{2})$ Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets;
- $(\underline{3})$ Revise the PAL to reflect an increase in the PAL as provided under paragraph (aa)(11) of this section;
- $(\underline{4})$ Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public; and
- $(\underline{5})$ Reduce the PAL to reflect newly applicable requirements (for example, NSPS) with compliance dates after the PAL effective date.
- (\underline{b}) The permitting authority shall have discretion to reopen the PAL permit for cause consistent with [insert reference to Title V requirement based on 40 C.F.R. § 70.7(f)].
- (\underline{c}) Except for the permit reopening in paragraph (aa)(8)(ii)(\underline{b}) of this section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (aa)(5) of this section.
- (9) Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in paragraph (aa)(10) of this section shall expire on the date specified in the permit, and the requirements in paragraphs (aa)(9)(i) through (v) of this section shall apply.

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- (i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs $(aa)(9)(i)(\underline{a})$ and (\underline{b}) of this section.
- (a) Within the time frame specified for PAL renewals in paragraph (aa)(10)(ii) of this section, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the permitting authority). The emission limitation for each significant and major emissions unit shall be BACT as determined in accordance with paragraph (aa)(6) of this section, and the remaining PAL allowable emissions shall be distributed among the remaining emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement as required under paragraph (aa)(10)(v) of this section, such distribution shall be made as if the PAL had been adjusted.
- (\underline{b}) The emission limitations established for each unit pursuant to paragraph (aa)(9)(i)(a) of this Section shall be incorporated in a revised permit.
- (ii) Reserved.
- (iii) Until the permitting authority issues the revised permit as required under paragraph $(aa)(9)(i)(\underline{b})$ of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (iv) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in paragraph (b)(2) of this section.
- (v) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements (BACT, RACT, NSPS, etc.)
- (10) Renewal of a PAL.

(i) The permitting authority shall follow the procedures specified in paragraph (aa)(5) of this section in

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approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the permitting authority.

- (ii) Application deadline. A major stationary source owner or operator shall submit a timely application to the permitting authority to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the permitting authority has taken final action on the application for renewal.
- (iii) <u>Application requirements</u>. The application to renew a PAL permit shall contain the information required in paragraphs (aa)(10)(iii)(\underline{a}) through (\underline{d}) of this section.
 - (\underline{a}) The information required in paragraphs (aa)(3)(i) through (iii) of this section.
 - (\underline{b}) A proposed PAL level.
- (\underline{c}) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
 - (\underline{d}) Any other information the owner or operator wishes the permitting authority to consider in determining the appropriate level for renewing the PAL.
 - (iv) <u>PAL adjustment</u>. The PAL level will be established pursuant to the same procedure set forth in paragraph (aa)(6) of this section.
 - (v) If the compliance date for a state or federal requirement that applies to the PAL source occurs after the PAL permit has been issued and before the PAL expires, and if the permitting authority has not already adjusted for such requirement, the PAL shall be

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adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first.

- (11) <u>Increasing a PAL before it expires</u>.
 - (i) The permitting authority may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (aa)(11)(i)(\underline{a}) through (\underline{d}) of this section.
 - (\underline{a}) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
- (\underline{b}) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the PAL baseline emissions of the small emissions units, plus the sum of the PAL baseline emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted.
 - (\underline{c}) The owner or operator obtains a major NSR permit for the source, requiring BACT for all units significant and major for the PAL pollutant.
 - (\underline{d}) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (ii) The permitting authority shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the PAL baseline emissions of the significant and major emissions units (assuming application of BACT equivalent controls

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as determined in accordance with paragraph $(aa)(11)(i)(\underline{b}))$, plus the sum of the PAL baseline emissions of the small emissions units, plus the significance level.

- (iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (aa)(5) of this section.
- (12) Monitoring requirements for PALs.
- (i) General requirements.
- (a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
- (\underline{b}) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (aa)(12)(ii)(\underline{a}) through (\underline{d}) of this section and must be approved by the permitting authority.
- (\underline{c}) Notwithstanding paragraph (aa)(12)(i)(\underline{b}) of this section, the owner or operator may employ an alternative monitoring approach that meets paragraph (aa)(12)(i)(\underline{a}) of this section if approved by the permitting authority.
- (\underline{d}) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.
- (ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (aa)(12)(iii) through (ix) of this section:
 - (\underline{a}) Mass balance calculations for activities using coatings or solvents and sulfur dioxide calculations for fuel burning sources;

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- (b) CEMS; and
- (c) CPMS or PEMS;
- (d) Emissions factors for small emissions units if mass balance calculations specified under (a) are not feasible.
- (iii) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents and sulfur dioxide calculations for fuel burning sources shall meet the following requirements:
- (\underline{a}) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
 - (\underline{b}) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
 - (g) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the permitting authority determines there is site-specific data or a site-specific monitoring program to support another content within the range.
- (iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
 - (\underline{a}) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and
 - (\underline{b}) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
- (v) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
 - (\underline{a}) The CPMS or the PEMS must be based on current site-specific data

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demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

- (\underline{b}) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the permitting authority, while the emissions unit is operating.
- (vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
 - (\underline{a}) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development; and
 - (\underline{b}) The emissions unit shall operate within the designated range of use for the emission factor, if applicable.
- (vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
- (viii) Notwithstanding the requirements in paragraphs (aa)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the permitting authority shall, at the time of permit issuance:
 - (\underline{a}) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or
 - (\underline{b}) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

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- (ix) Re-validation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the permitting authority. Such testing must occur at least once every 5 years after issuance of the PAL.
- (13) Recordkeeping requirements.
- (i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (aa) of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.
- (ii) The PAL permit shall require an owner or operator to retain a copy of the following records for 5 years after the PAL expires:
 - (\underline{a}) A copy of the PAL permit application and any applications for revisions to the PAL; and
 - (\underline{b}) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.
- (14) Reporting and notification requirements. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the permitting authority in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (aa)(14)(i) through (iii) of this section.
- (i) <u>Semi-annual report</u>. The semi-annual report shall be submitted to the permitting authority within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs $(aa)(14)(i)(\underline{a})$ through (g) of this section.
- $(\underline{a}\,)$ The identification of owner and operator and the permit number.
- (\underline{b}) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (aa)(13)(i) of this section.
- (\underline{c}) All data relied upon, including, but not limited to, any Quality Assurance

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or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

- $(\underline{d}\,)$ A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
- (\underline{e}) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
- (\underline{f}) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by (aa)(12)(vii).
- (g) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (ii) <u>Deviation report</u>. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedances of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to [cite to Title V program analog to 40 C.F.R §70.6(a)(3)(iii)(B)] shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by [cite to Title V program analog to 40 C.F.R §70.6(a)(3)(iii)(B)] . The reports shall contain the following information:
 - (\underline{a}) The identification of owner and operator and the permit number;
 - (\underline{b}) The PAL requirement that experienced the deviation or that was exceeded;
 - (\underline{c}) Emissions resulting from the deviation or the exceedance; and
 - (d) A signed statement by the

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responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

- (iii) <u>Re-validation results</u>. The owner or operator shall submit to the permitting authority the results of any re-validation test or method within 3 months after completion of such test or method.
- (15) Reserved.

Option (aa)-C: <u>Declining Allowables PAL</u>. The provisions in paragraphs (aa)(1) through (15) of this section govern allowables-based PALs.

- (1) Applicability.
- (i) The permitting authority may approve the use of an allowables-based PAL for any existing major stationary source if the PAL meets the requirements in paragraphs (aa)(1) through (15) of this section. The term "PAL" shall mean "allowables-based PAL" throughout paragraph (aa) of this section.
- (ii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (aa)(1) through (15) of this section, and complies with the PAL permit:
- (\underline{a}) Is not a major modification for the PAL pollutant; and
- $(\underline{b})\,$ Does not have to be approved through the PSD program.
- (iii) A major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL, including the provisions of (r)(4) of this Section.
- (2) <u>Definitions</u>. For the purposes of this section, the definitions in paragraphs (aa)(2)(i) through (xi) of this section apply. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (b) of this section or in the Act.

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- (i) <u>Allowables based PAL</u> for a major stationary source means a PAL, determined consistent with the procedures of paragraph (aa).
- (ii) Reserved.
- (iii) <u>Small emissions unit</u> means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (b)(23) of this section or in the Act, whichever is lower.

(iv) Major emissions unit means:

- (\underline{a}) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or
- (b) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.
- (v) Plantwide applicability limitation (PAL) means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is federally enforceable and enforceable as a practical matter established source-wide in accordance with paragraphs (aa)(1) through (15) of this section.
- (vi) <u>PAL effective date</u> generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant. The PAL limit that was in effect prior to the change shall remain in effect until the PAL is effective.
- (vii) PAL effective period means the period beginning with the date of issuance of the PAL permit and ending 10 years later.

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(viii) PAL major modification Option
[(aa)-C](aa)(2)(viii)-A: [Use this option
if the definition of "net emissions
increase" has been included in the rule.]

(viii) <u>PAL major modification</u> means, notwithstanding paragraphs (b)(2) and (b)(3) of this section (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level greater than the PAL.

(viii) Option [(aa)-C](aa)(2)(viii)-B:
Use this option if the definition of "net
emissions increase" has not been included
in the rule.]

- (viii) <u>PAL major modification</u> means, notwithstanding paragraph (b)(2) of this section (the definition of major modification), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level greater than the PAL.
- (ix) <u>PAL permit</u> means the permit issued by the permitting authority that establishes a PAL for a major stationary source.
- (x) <u>PAL pollutant</u> means the pollutant for which a PAL is established at a major stationary source.
- (xi) <u>Significant emissions unit</u> means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in paragraph (b)(23) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (aa)(2)(iv) of this section.
- (xii) and (xiii) [Definitions for "PAL Baseline Period" and "PAL Baseline Emissions." Because the two definitions work together, the two options for these terms contain both definitions. Under either option, the standard baseline would be the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. Under Option [(aa)-C](aa)(2)(xii)&(xiii)-A, the

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permitting authority may authorize the use of a more representative time period within the past 5 years. Under Option [(aa)-C](aa)(2)(xii)&(xiii)-B, the permitting authority may establish a baseline based upon the highest 24 months of production within the past 5 years.

(xii) and (xiii) Option [(aa)-C](aa)(2)(xii)&(xiii)-A (Most Representative 2 of 5 Option):

- (xii) <u>PAL Baseline Period</u>. The PAL baseline period is the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. The permitting authority may allow the use of a different 24 month period within the last 5 years upon a determination that the operations during that period would be more representative of normal source operations.
- (xiii) PAL Baseline emissions means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (aa)(2)(xiii)(A) through (C) of this section.
- (\underline{a}) For any emissions unit that was an existing emissions unit during the PAL baseline period, PAL baseline emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the PAL baseline period.
- $(\underline{1})$ The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.
- $(\underline{2})$ The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the PAL baseline period.
- $(\underline{3})$ The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the PAL baseline period.

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- $(\underline{4})$ The average rate shall not be based in any period for which there is inadequate information either for determining emissions, in tons per year, or for adjustments required by paragraphs (aa)(xiii)(A)(1)-(3) of this section.
- (b) For any existing emissions unit that was not an existing emissions unit during the PAL baseline period but commenced operation during or after the selected PAL baseline period, the PAL baseline emissions shall equal the average rate in tons per year at which the unit emitted the pollutant during the two calendar years immediately preceding when the PAL application is submitted, adjusted pursuant to (aa)(xiii)(A).
- (\underline{c}) For a new emissions unit, PAL baseline emissions shall equal zero.
- (\underline{d}) PAL baseline emissions shall be determined by measurement, calculations, estimations, and record keeping in the order of the following preferences:
 - (1) Monitoring Systems
 - (A) Continuous Emission Monitoring System (CEM) data integrated to annual emissions using flow meters and conversion factors.
 - (B) Predictive Emission Monitoring System (PEMS)
 - (2) Other Measurements and Calculations
 - (A) Stack emissions
 - (i) Determine hourly emissions by stack emission testing,
 - (ii) Determine annual operating
 hours using hour meter records, and
 - (iii) Calculate annual emissions using hourly emissions and annual operating hours,

OR

- (iv) Determine emissions per heat
 input by stack emission testing,
- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions

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using emissions per heat input and annual heat input.

- (B) Mass balance
- (i) Determine the amount of materials used through measurements in the process,
- (ii) Calculate emissions per mass of material used using mass balance techniques.
- (iii) Determine amount of material
 used in a year, and
- (iv) Calculate annual emissions using emissions per mass of material and amount of material used in a year.
- (C) Emission Factors
- (i) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions,
- (ii) Determine annual operating
 hours using hour meter records, and
- (iii) Calculate annual emissions using hourly emissions and annual operating hours,

OR

- (iv) Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit,
- (ν) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions using emissions per heat input and annual heat input.
- $(\underline{3})$ Recordkeeping: Instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records (such as production records, fuel consumption records, fuel purchase receipts, laboratory reports on fuel analysis, third party records such as electric bills, etc.)
 - (A) Determine hourly emissions using stack emission tests, mass balance or

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emission factors.

- (B) Determine annual hours of operation using production records, etc.,
- (C) Calculate annual emissions using hourly emissions and annual hours of operation,

OR

- (D) Determine emissions per heat input unit using stack emission tests, mass balance or emission factors,
- (E) Determine amount of fuel combusted in a year records and calculate annual heat input, and
- (F) Calculate annual emissions using emissions per heat input and annual heat input.

Option [(aa)-C](aa)(2)(xii)&(xiii)-B (Highest Production 2 of 5 Option):

- (xii) <u>PAL Baseline Period</u>. The PAL baseline period is the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. In the alternative, the permitting authority may use the 24 month period when the production rate of the stationary source was the highest.
- (xiii) PAL Baseline emissions means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (aa)(2)(xiii)(A) through (C) of this section.
 - (A) For any emissions unit that was an existing emissions unit during the PAL baseline period, PAL baseline emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the PAL baseline period unless the permitting authority selected as the PAL baseline period the highest 24 months of production within the past 5 years. In the latter event, PAL baseline emissions shall be established by calculating the average rate, in tons per year, based on current emissions data and the unit's utilization during the consecutive 24 month period of highest production within the last 5 years.

(1) The average rate shall include

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fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.

- (2) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the PAL baseline period.
- (3) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the PAL baseline period.
- (4) The average rate shall not be based in any period for which there is inadequate information either for determining emissions, in tons per year, or for adjustments required by paragraphs (aa)(xiii)(A)(1)-(3) of this section.
- (B) For any existing emissions unit that was not an existing emissions unit during the PAL baseline period but commenced operation during or after the selected PAL baseline period, the PAL baseline emissions shall equal the average rate in tons per year at which the unit emitted the pollutant during the two calendar years immediately preceding when the PAL application is submitted, adjusted pursuant to (aa)(xiii)(A).
- (C) For a new emissions unit, PAL baseline emissions shall equal zero.
- (D) PAL baseline emissions shall be determined by measurement, calculations, estimations, and record keeping in the order of the following preferences:
 - (1) Monitoring Systems
 - (a) Continuous Emission Monitoring System (CEM) data integrated to annual emissions using flow meters and conversion factors.
 - (b) Predictive Emission Monitoring

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System (PEMS)

- (2) Other Measurements and Calculations
- (a) Stack emissions
 - (i) Determine hourly emissions by stack emission testing,
 - (ii) Determine annual operating
 hours using hour meter records, and
 - (iii) Calculate annual emissions using hourly emissions and annual operating hours,

OR

- (iv) Determine emissions per heat
 input by stack emission testing,
- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions
 using emissions per heat input and
 annual heat input.
- (b) Mass balance
- (i) Determine the amount of materials used through measurements in the process,
- (ii) Calculate emissions per mass of material used using mass balance techniques,
- $\mbox{(iii)}$ Determine amount of material used in a year, and
- (iv) Calculate annual emissions using emissions per mass of material and amount of material used in a year.
- (c) Emission Factors
 - (i) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions,
 - (ii) Determine annual operating
 hours using hour meter records, and
 - (iii) Calculate annual emissions using hourly emissions and annual operating hours,

OR

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- (iv) Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit,
- (v) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input, and
- (vi) Calculate annual emissions
 using emissions per heat input and
 annual heat input.
- (3) Recordkeeping: Instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records (such as production records, fuel consumption records, fuel purchase receipts, laboratory reports on fuel analysis, third party records such as electric bills, etc.)
- (a) Determine hourly emissions using stack emission tests, mass balance or emission factors,
 - (b) Determine annual hours of operation using production records, etc.,
 - (c) Calculate annual emissions using hourly emissions and annual hours of operation,

OR

- (d) Determine emissions per heat input unit using stack emission tests, mass balance or emission factors,
- (e) Determine amount of fuel combusted in a year records and calculate annual heat input, and
- (f) Calculate annual emissions using emissions per heat input and annual heat input.
- (3) Permit application requirements. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the permitting authority for approval:
- (i) A list of all emissions units at the source designated as small, significant, or major based on their potential to

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- emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.
- (ii) Calculations of the PAL baseline emissions, with supporting documentation, for all emission units at the source.
- (iii) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (aa)(13)(i) of this section.
- (iv) A demonstration that a source operating under the PAL will not have an adverse air quality impact. The permitting authority may require that the demonstration include any or all of the requirements set forth in paragraphs (k) through (p) of this section.
- (v) Any other information required by the permitting authority.
- (4) <u>General requirements for</u> <u>establishing PALs</u>.
- (i) The permitting authority may establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs $(aa)(4)(i)(\underline{a})$ through (\underline{h}) of this section are met.
- (\underline{a}) The PAL shall impose an emission limitation that is federally enforceable and enforceable as a practical matter, for the entire major stationary source.
- (\underline{b}) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (q) of this section.
- (\underline{c}) The PAL permit shall contain all the requirements of paragraph (aa)(7) of this section.
- (\underline{d}) The PAL shall be set in accordance with the requirements of paragraph (aa)(6) of this section.
- (\underline{e}) Each PAL shall regulate emissions of only one pollutant.
- $(\underline{f}\,)$ Each PAL shall a term of no more than $\overline{10}$ years.

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- (g) The PAL permit shall contain monitoring, recordkeeping and reporting conditions consistent with paragraphs (aa)(12) through (14) of this section.
- (\underline{h}) The owner or operator demonstrates that no adverse air quality impact will result from operating under the PAL, using the provisions of paragraphs (k) through (p) of this section as applicable, and using for its analysis the allowable emissions from each emissions unit.
- (ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under §51.165(a)(3)(ii) of this chapter unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.
- (5) Reserved.
- 6) <u>Setting the PAL level</u>.
- (i) The initial PAL level for a major stationary source shall be established as provided in paragraphs (aa)(6)(i)(a) through (c) of this section:
- (\underline{a}) the significant level for the PAL pollutant under paragraph (b)(23) of this section or under the Act, whichever is lower; plus
- (\underline{b}) the PAL baseline emissions of the PAL pollutant for each emissions unit at the source at the time the application is submitted; however
- (\underline{c}) PAL baseline emissions from any emissions unit that has been permanently shut down should not be included.
- (ii) The permitting authority shall establish a future effective PAL adjustment in the PAL permit to reflect a reduction (in tons/year) for any applicable federal or state regulatory requirement with a future compliance date.
- (iii) As a condition for obtaining a PAL, the source owner or operator agrees to apply for and install BACT on all significant and major emissions units within five years of the PAL effective date. The permitting authority shall specify a reduced PAL level over time to

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reflect installation of the new controls. Ultimately, after all pollution controls required by this paragraph have been installed, the PAL level must equal the lower of either:

- (\underline{a}) the level set in paragraph (aa)(6)(i) of this section, or
- (\underline{b}) the potential to emit of the PAL pollutant of each significant and major emissions unit at the source; plus PAL baseline emissions from each small unit at the source plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(23) or under the Act, whichever is lower.
- (7) Contents of the PAL permit. The PAL permit must contain, at a minimum, the information in paragraphs (aa)(7)(i) through (x) of this section.
- (i) The PAL pollutant and the applicable source-wide emission limitations in tons per year and their effective dates.
- (ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).
- (iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (aa)(10) of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until final action is taken by the permitting authority on the application for renewal.
- (iv) A requirement that emission calculations for compliance purposes must include any noncompliant emissions in excess of any emissions limitations, emissions associated with startup and shutdown, and emissions associated with upsets or malfunctions.
- (v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (aa)(9) of this section.
- (vi) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by paragraph (aa)(13)(i) of this section.

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- (vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (aa)(12) of this section.
- (viii) A requirement to retain the records required under paragraph (aa)(13) of this section on site. Such records may be retained in an electronic format.
- (ix) A requirement to submit the reports required under paragraph (aa)(14) of this section by the required deadlines.
- (x) Any other requirements that the permitting authority deems necessary to implement and enforce the PAL.
- (8) PAL effective period and reopening of the PAL permit.
- (i) <u>PAL effective period</u>. The permitting authority shall specify a PAL effective period of no more than 10 years.
- (ii) Reopening of the PAL permit.
- (\underline{a}) During the PAL effective period, the permitting authority must reopen the PAL permit to:
 - $(\underline{1})$ Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
 - $(\underline{2})\,$ Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets;
 - $(\underline{3})$ Revise the PAL to reflect an increase in the PAL as provided under paragraph (aa)(11) of this section;
- $(\underline{4})$ Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.
- $(\underline{5})$ Reduce the PAL to reflect newly applicable requirements (for example, NSPS) with compliance dates after the PAL effective date.

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- (\underline{b}) The permitting authority shall have discretion to reopen the PAL permit for cause consistent with [insert reference to Title V requirement based on 40 C.F.R. § 70.7(f)].
- (\underline{c}) Except for the permit reopening in paragraph $(aa)(8)(ii)(\underline{b})$ of this section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (aa)(5) of this section.
- (9) Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in paragraph (aa)(10) of this section shall expire at the end of the PAL effective period, and the requirements in paragraphs (aa)(9)(i) through (v) of this section shall apply.
- (i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs $(aa)(9)(i)(\underline{a})$ and (\underline{b}) of this section.
- (a) Within the time frame specified for PAL renewals in paragraph (aa)(10)(ii) of this section, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the permitting authority). The emission limitation for each significant and major emissions unit shall be reflective of BACT, and the remaining PAL allowable emissions shall be distributed among the remaining emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (aa)(10)(v) of this section, such distribution shall be made as if the PAL had been adjusted.
- (\underline{b}) The permitting authority shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the permitting authority determines is appropriate.

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- (ii) Reserved.
- (iii) Until the permitting authority issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph $(aa)(9)(i)(\underline{b})$ of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (iv) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in paragraph (b)(2) of this section.
- (v) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.)

(10) Renewal of a PAL.

- (i) The permitting authority shall follow the procedures specified in paragraph (aa)(5) of this section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the permitting authority.
- (ii) Application deadline. A major stationary source owner or operator shall submit a timely application to the permitting authority to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until final action is taken by the permitting authority on the application for renewal.
- (iii) Application requirements. The application to renew a PAL permit shall contain the information required in paragraphs (aa)(10)(iii)(a) through (d)

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of this section.

- (\underline{a}) The information required in paragraphs (aa)(3)(i) through (iii) of this section.
 - (\underline{b}) A proposed PAL level.
- (\underline{c}) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
- (\underline{d}) Any other information the owner or operator wishes the permitting authority to consider in determining the appropriate level for renewing the PAL.
- (iv) <u>PAL adjustment</u>. The PAL level will be established pursuant to the same procedure set forth in paragraph (aa)(6) of this section.
- (v) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the permitting authority has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first.
- (11) <u>Increasing a PAL during the PAL effective period</u>.
- (i) The permitting authority may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (aa)(11)(i)(\underline{a}) through (\underline{d}) of this section.
- (\underline{a}) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
- (\underline{b}) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the PAL baseline emissions of the small emissions units, plus the sum of the PAL baseline emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would

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result from the application of BACT on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted.

- (\underline{c}) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (aa)(11)(i)(a) of this section, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.
- (\underline{d}) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (ii) The permitting authority shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the PAL baseline emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with paragraph $(aa)(11)(i)(\underline{b}))$, plus the sum of the PAL baseline emissions of the small emissions units, plus the significance level.
- (iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (aa)(5) of this section.
- (12) Monitoring requirements for PALs.
- (i) General requirements.
- (a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding

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to enforce the PAL permit.

- (\underline{b}) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (aa)(12)(ii)(\underline{a}) through (\underline{d}) of this section and must be approved by the permitting authority.
- (\underline{c}) Notwithstanding paragraph (aa)(12)(i)(\underline{b}) of this section, the owner or operator may employ an alternative monitoring approach that meets paragraph (aa)(12)(i)(\underline{a}) of this section if approved by the permitting authority.
- (\underline{d}) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.
- (ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (aa)(12)(iii) through (ix) of this section:
 - (\underline{a}) Mass balance calculations for activities using coatings or solvents and sulfur dioxide calculations for fuel burning sources;
 - (\underline{b}) CEMS; and
 - (c) CPMS or PEMS;
- (\underline{d}) Emissions factors for small emissions units if mass balance calculations specified under (a) are not feasible.
- (iii) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents and sulfur dioxide calculations for fuel burning sources shall meet the following requirements:
- (\underline{a}) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
- (\underline{b}) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be

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accounted for in the process; and

- (\underline{c}) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the permitting authority determines there is sitespecific data or a site-specific monitoring program to support another content within the range.
- (iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
 - (\underline{a}) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and
 - (\underline{b}) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
- (v) CPMS or PEMS. An owner or operator
 using CPMS or PEMS to monitor PAL
 pollutant emissions shall meet the
 following requirements:
 - (\underline{a}) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and
 - (\underline{b}) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the permitting authority, while the emissions unit is operating.
- (vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
- (\underline{a}) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development; and
 - (\underline{b}) The emissions unit shall operate within the designated range of use for the emission factor, if applicable.
- (\mbox{vii}) A source owner or operator must record and report maximum potential

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emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

- (viii) Notwithstanding the requirements in paragraphs (aa)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the permitting authority shall, at the time of permit issuance:
- (\underline{a}) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or
- (\underline{b}) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.
- (ix) Re-validation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the permitting authority. Such testing must occur at least once every 5 years after issuance of the PAL.

(13) Recordkeeping requirements.

- (i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (aa) of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.
- (ii) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:
 - (\underline{a}) A copy of the PAL permit application and any applications for revisions to the PAL; and
 - (\underline{b}) Each annual certification of compliance pursuant to title V and the data relied on in certifying the

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compliance.

- (14) Reporting and notification requirements. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the permitting authority in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (aa)(14)(i) through (iii) of this section.
- (i) <u>Semi-annual report</u>. The semi-annual report shall be submitted to the permitting authority within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs $(aa)(14)(i)(\underline{a})$ through (g) of this section.
- (\underline{a}) The identification of owner and operator and the permit number.
- (\underline{b}) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (aa)(13)(i) of this section.
- (\underline{c}) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
- (\underline{d}) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
- (\underline{e}) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
- (\underline{f}) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by (aa)(12)(vii).
- (\underline{g}) A signed statement by the responsible official (as defined by the

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applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

- (ii) <u>Deviation report</u>. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedances of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to [cite to Title V program analog to 40 C.F.R §70.6(a)(3)(iii)(B)] shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by [cite to Title V program analog to 40 C.F.R §70.6(a)(3)(iii)(B)]. The reports shall contain the following information:
 - (\underline{a}) The identification of owner and operator and the permit number;
 - (\underline{b}) The PAL requirement that experienced the deviation or that was exceeded;
 - (\underline{c}) Emissions resulting from the deviation or the exceedance; and
 - (\underline{d}) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (iii) <u>Re-validation results</u>. The owner or operator shall submit to the permitting authority the results of any re-validation test or method within 3 months after completion of such test or method.
- (15) Reserved.

§ 52.21(bb) If any provision of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

(bb) If any provision of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

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